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WONDER Stories

August

HUGO GERNSBACK

"DIMENSIONAL FATE"
by A. L. Burkholder

25

The THIRD SEX! Man or Woman?

For hundreds of years men and women have talked with hushed voices about "STRANGE PEOPLE"—men who are not men—women who are not women. No one has ever *dared* to talk out in the open about it. Is it any wonder that the shocking, lurid facts of this great social evil are unknown to the great mass of men and women? Is it any wonder that strange nick-names are commonly used to describe these creatures.

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Vol. 6, No. 3 **TABLE OF CONTENTS** August, 1934

WONDERS OF REALITY an editorial *by Hugo Gernsback* 261

DIMENSIONAL FATE *by A. L. Burkholder* 262

A VISIT TO VENUS *by Festus Pragnell* 270

THE RETURN OF TYME *by A. Fedor* and *Henry Hasse* 294

WHAT IS YOUR SCIENCE KNOWLEDGE 304

THE SENSE TWISTER a short-short story *by W. Varick Nevins, III* 305

COMPLETELY EMPTY SPACE UNLIKELY news article 309

THE MEN FROM GAYLN *by E. Mantell* 310

ENSLAVED BRAINS *by Eando Binder* 320
(In Three Parts—Part Two)

FORTHCOMING STORIES 365

SCIENCE QUESTIONS AND ANSWERS a monthly department 368

THE SCIENCE FICTION LEAGUE a monthly department 370

THE READER SPEAKS—Letters From Readers 373

ON THE COVER this month we see the alien world of the other dimension, showing the daring young scientists from Earth and the winged monster, a native of the weird planet. (From "Dimensional Fate," by A. L. Burkholder.) Cover by Paul.

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PAUL KORNEKE, JR. N. S.
Pittsburgh, Pa.

FOREIGN STATIONS GALORE

It may interest you to know that yesterday, on my Doerle short wave set at 12:45. P.S.T., I heard CFH at Rio de Janeiro. They came in at 10220 Kcs. and the announcing voice was as clear and strong as on an ordinary telephone.

I am using just 45 volts for both detector and audio stage on the plate. What it would do on 90 volts on the audio I do not venture to say.

At the moment 10.35 P.S.T., I am listening to phone from Japan to Hawaii. No station identification however. Around 16,030 K.C.S. KKO—Kauhaku Hawaii just identified his station.

HARRY V. DAVIS,
Penticton, B.C., Canada.

THE WHOLE WORLD!

In the past two days I brought in with my Oscillodyne S-W Set the following foreign stations: 12BO, DJC (this with such volume that I was able to plug in the loudspeaker) and a French station which I was unable to identify, but I believe it to be FYA Pontoise, and also another German station which I have not been able to identify as yet.

On Wednesday HAQ was weak and noisy and DJC was loud and clear, but on Thursday the conditions were reversed. I have received many United States stations, such as W9XAA, W9XF, W8XK, W2XE, etc., etc.

In Short Wave Craft, this set was called a WORLD SET, and I certainly agree.

C. W. KNIERIM,
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VOLUME 6
No. 3

WONDER Stories

AUGUST
1934

. . . . Prophetic Fiction is the Mother of Scientific Fact . . . .

HUGO GERNSBACK, *Editor-in-Chief*
CHARLES D. HORNIG, *Managing Editor* FRANK R. PAUL, *Art Editor*
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WONDERS OF REALITY

By HUGO GERNSBACK

THE relation between mind and matter is such a tremendous problem that it is doubtful whether we ever shall know much that is basic about it. We live in a material world in which practically everything that we see, touch and feel is forever unknowable in its inner reality. We can only guess, at best, what is going on; and most of our guesses are usually wrong.

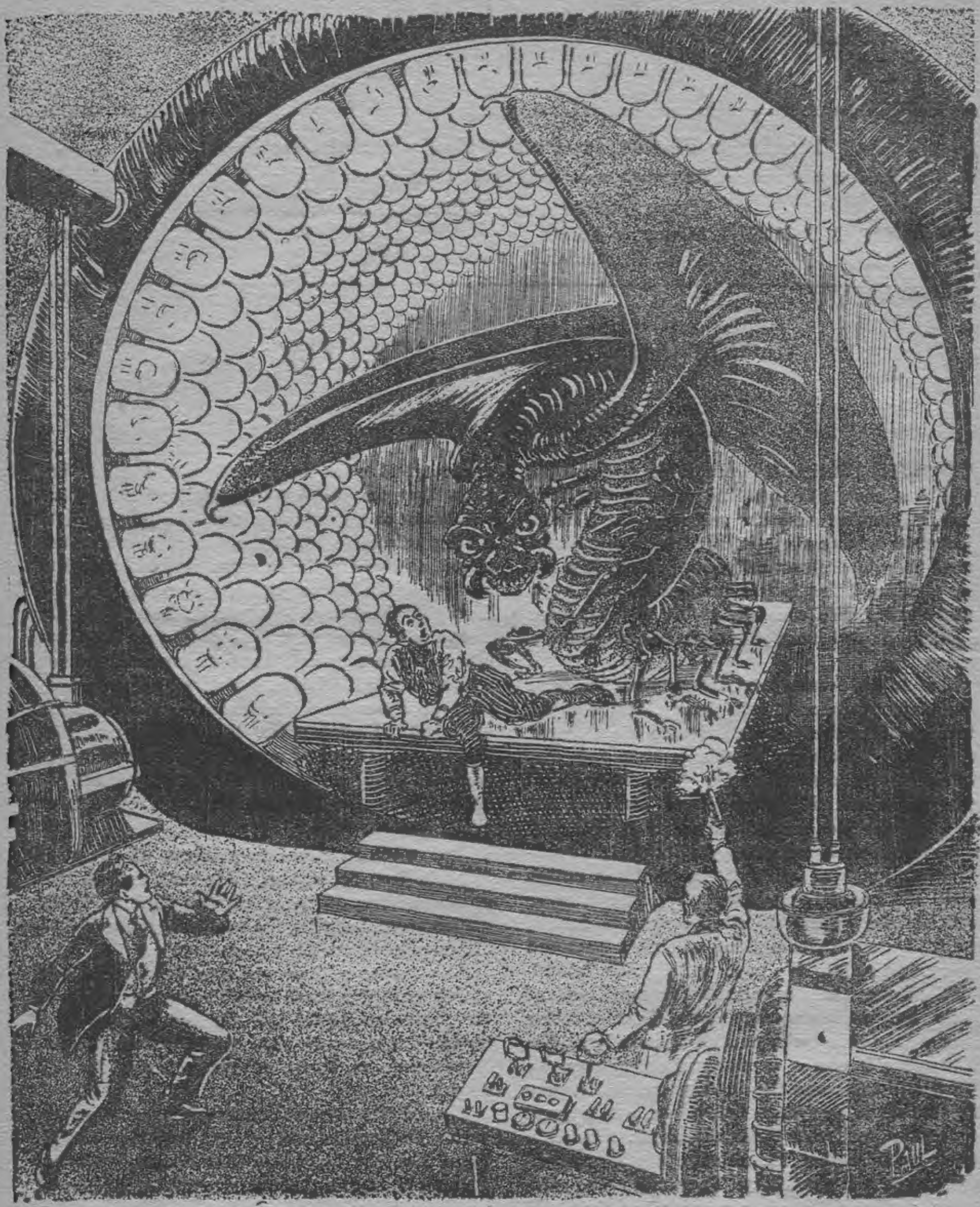
That is the reason why, every year, we have a new electronic or atomic theory, and why the theories about the outside universe are changed with every season, to fit this or that new discovery. We know very little about the general laws of nature. We accept them, but have not the slightest idea what it is all about. We talk glibly about such forces as gravitation, electricity, radiation, etc., without the slightest notion what we are talking about. We are forever noticing the *effects* of all the natural forces, but we know next to nothing of their causes and their constitution. We have had physical knowledge of the electric current for two hundred years, yet we know little more about it today than we knew in the days of Benjamin Franklin. And when it comes to material substances, we know still less; and the chances are that it may be thousands of years before we get a good conception of what it is all about. Scientists today surmise that the ultimate particles of all substances are electricity. They call these electrons, and various other names; but they still do not know what electricity itself really is, and they may never know.

And when it comes to the linking of mind and matter in our own brains and brain cells, the sum total of what we know is almost zero. We know that the mind is the driving force which the brain obeys, and we compare the brain to a huge telephone exchange, where numbers are called, and where the nervous system comprises the telephone wires which go to the various parts of the body. But we do not know the connection between the incorporeal activity, which we call "mind," and the material thing, which we call "brain." Various observations tend to show that the brain works on some electrical principle; but this reasoning again leaves entirely out of account the activity which we call "mind"—which is as intangible as it has always been since human beings started to think about their thoughts.

And when it comes to analysis of the mind into intellect, perception, judgment, and various other qualities of the mind that distinguish the genius from the idiot, the problem, you will find, becomes more complex as you go on.

As a matter of fact, one may make the observation that the more commonplace a thing is, the more wonderful and the more complex it becomes at the same time, and the more difficult it becomes to know anything about its real nature.

We, of the present century, boast of our superior civilization and of our superior knowledge. Yet, the laughable fact is that we know absolutely nothing about everything. When it comes down to the fine points or—as one says in the vernacular—"when we get down to brass tacks," nothing at all worth while is known, and nothing will be known for many generations to come.



(Illustration by Paul)

The beast seemed to be as astounded as we were, for it dropped its captive and crouched down upon the platform and glared at us with a stupefied air.

DIMENSIONAL FATE

By A. L. BURKHOLDER

● **Here is a good, exciting story of the fourth dimension, of a world co-existent with ours, yet cannot be detected by any of our senses because of the vibrational barrier which separates us from it.**

We have found that many of our readers thoroughly enjoy stories of this type, for it is one of the most fantastic themes that still remain within the bounds of logic.

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● *Morituri te Salutanus!*—The old Roman gladiators' salute, "We who are about to die, salute thee!" That seems a most appropriate opening for this narrative, for when you read these lines, Ben and I shall be dead—yes, dead!—legally executed by the state, eliminated as menaces to society. Ha! What a joke! We who have saved the world! But I am wandering and my bitterness destroys my logic. I do not expect to be believed, for the fact that this tale is unbelievable has been well brought home to me by the circumstances of the past few weeks. Yet I will persist and leave it with the warden who has promised to have it published—after "the law has taken its course." Perhaps it may serve as a warning to some future investigators.

I am Leopold Dochler, now awaiting the end in the death-house of this—ah—institution. The man in the next cell is Benjamin Patterson. We have been tried, found guilty, and sentenced to death for the murder of our friend and colleague, Joseph Burnett, and are suspected of being implicated in the disappearance of our other friend and colleague, Alfred Madison.

The beginning of this story goes back to '17, when we were all four of us young men serving our country as privates in Company E of the — U.S. Infantry. We all had a great deal in common; all being orphans, all being from New York City, and all being young fellows who had "lied like gentlemen" about our ages in order to "get into the big argument, over there." It must have been Fate who placed us in the same squad, under a particularly obnoxious corporal. He and the rest of our squad all "went west" in the Argonne Forest, poor fellows; but we four came through almost two years of war unscathed. We marched into Germany and then were eventually returned to New York and honorably discharged. That was the beginning of our life-long friendship, for after the war, we stayed together and worked at odd jobs, trying to eke out a bare existence during those hard times. Meanwhile, the hand of Fate was completing the next link in the strange chain of circumstances that brought us to this.

One evening, about a year after our return, Burnett rushed into our miserable flat shouting with glee. After we had calmed him down enough to get an understandable statement out of him, we learned that an uncle of his, who had never even seen him, had died, leaving an estate of fifteen million dollars, and that he was the only heir. Then he stated that we were all going to college together. At first we demurred, telling him that it was unfair to him, but he insisted. He also insisted that, henceforth, we should share everything together and reminded us that he had been the least successful in job-seeking and had been practically living off of us for the past year or more.

"Besides," he continued, "we can all

take allied engineering subjects, as we are all inclined in that way, and after graduation, we can enter business together and probably be successful when one would fail."

So it was decided. All of us were elated and a little dazed by the sudden good fortune that had been literally thrown into our laps. Thus Fate had completed another link in the fatal chain.

Our educations had not been very complete, so we had to spend two years finishing our high school courses and reviewing what we had forgotten. Finally, however, in '22, we all entered Western Coast University together. My first two years were almost completely wasted, for I soon discovered that I had no scientific ability at all and was more adapted to philosophical and literary pursuits. In my third year, I transferred to law, and thereafter led my classes and finally graduated with highest honors from the law college. In the same year, '29, the other three of my partnership also graduated with masters' degrees in engineering.

We entered business together and formed an engineering company. My friends were hydraulic, mechanical, and electrical engineers, and I was their legal adviser and partner. Having had no other interests in college, we had all worked hard, each determined to outdo the others, and we applied the same energy and concentration to our work. We had no financial worries in college and then had plenty of capital with which to start in business, thanks to Burnett's generosity. So, despite the great world-wide depression that set in during the same year, we did well and soon became all moderately wealthy from our business.

It was then that Burnett, who was our electrical engineer, began his fatal experiments in electro-physics and atomic structure. That he was a genius, there is no denying, and he made amazing progress from the start. We lent him every assistance possible. He believed that the fourth dimension was a dimension of space and not of time, although closely related in some manner to the element of time. The theory of time-contraction is now familiar to every educated person, namely that, as an object moves, it contracts or loses dimension in the direction of travel, until it has lost all of its length in the direction of travel when it reaches the speed of light (about 186,000 miles per second); then it is a two dimensional object. Burnett further elaborated upon this theory by maintaining that if the speed of a moving object exceeded the speed of light, the object would not only have lost all of its length in the direction of travel, but would have acquired a negative length in the same direction. In other words, it would have become a fourth dimensional object when it exceeded the critical speed of light. Such an object, he believed, would have only three dimensions but one of them would be a dimension utterly alien to us and the object would then be utterly imperceptible to our senses.

In order to accomplish this translation of our third dimension into the fourth, he planned to speed up the movements of the electrons about their respective protons and the movements of the various protons about each other. Then in order to avert an explosion of the atoms concerned, due to their flying apart as a result of increased centrifugal force, the electrons would be drawn closer to their respective protons and the various protons closer to each other. All of this he hoped to produce with electrical machinery, and when we pointed out to him that, aside from disproving some of the earth's leading scientists' pet theories and solving the secret of atomic power, he would have some slight mechanical difficulties to overcome in actually building his machines, he simply laughed and flung himself into his work.

Plans and models seemed to magically take shape under his hands and, although Patterson and Madison were popularly conceded to be geniuses in certain engineering lines, they were as lost as babes in the woods when they tried to follow his more intricate lines of reasoning.

While I, a mere lawyer with only two years of study in engineering, had to throw up my hands and beat a hurried retreat to my private office, where I immediately commenced work upon the most difficult case available in an effort to persuade myself that I was not, after all, a mere moron in intellectual matters.

● There is not much use of discussing the two years of experimentation and work that followed. Suffice it to say that my three companions worked incessantly upon what they termed "the great work" and over-ruled all of my suggestions that a little attention to business might not be amiss. While I labored frantically to keep the company off of the rocks, they worked like slaves upon the terrible machine that was to end us all. What pranks Fate can play! I hired engineer after engineer to do the work that piled up, neglected by my partners, only to have my friends put them to work planning out some detail of the great incomprehensible machine that was being built. In fact, I taxed all of my legal knowledge to the uttermost limit fighting lawsuits against irate customers who were constantly suing us because their projects were being held up by our failure to fill contracts within the time specified.

Every accounting period, I would indignantly present my three friends with an unfavorable balance sheet and wrathfully point out to them the loss incurred during the period. Burnett would smile and hand me a check to cover the deficit. Then I would retaliate by stating that if they persisted in their "crack-brained schemes," even his vast fortune would soon be gone. Thereupon, one or all of them would impatiently shrug, as if to ask me how much longer I would keep them from their work. At this point, I would grow speechless with indignation and rush from the laboratory back to my office, only to be beset by some customer demanding to know why in the name of this, that, and the other thing his boat or machine or something had not been completed as per schedule. We went through this little act so often that we finally got so we would do it automatically and as a matter of course. If Fate has any sense of humor, it must have howled with mirth.

But this eventually came to an end, as indeed all things must, for one day, when I had suffered a particularly discouraging reverse in court and was sitting in my office reflecting bitterly on how I could have prevented it had my three friends only coöperated with me more fully and that the good name of our business was now practically gone, I received a call to hurry to Burnett's laboratory. I went muttering and wondering "what now" and was astounded to find my friends executing an extempóraneous Indian war dance in the anteroom of the huge laboratory. Just as I was about to withdraw and telephone to the nearest psychopathic hospital, I was seized by Madison.

"It's a success," he shouted excitedly in my ear. "Come; see it!"

I was hauled into the laboratory proper to be confronted by an amazingly complex jumble of vacuum tubes, pipes, wires, meters and valves, liberally besprinkled with a generous number of motors, transformers, generators, pumps, and other devices unknown to me. In fact, the whole interior of the great laboratory looked like an engineer's nightmare to me. The explanation that followed was as incomprehensible to me as a lecture on selenium cells would be to a Hottentot.

However, the gist of the explanation seemed to be that any object placed within an imposing hemisphere of vacuum tubes had the movements of its atoms and of their component electrons speeded up until they far exceeded the speed of light, whereupon they became fourth dimensional and, of course, the object they formed likewise became fourth dimensional. To prevent them from bursting due to the increase of centrifugal force, they were drawn closer together, thus causing the object to become smaller and denser. A very huge and complicated system of refrigeration effectually dis-

posed of the heat generated by this increase of atomic and electronic action.

"Now we will show you," Burnett joyously stated, and as he spoke, he placed a porcelain crucible upon a small stand and set it within the hemisphere of huge tubes.

I was cautioned to stand well back and my three friends hastened about in a nervous manner, hastily closing huge switches and adjusting intricate-looking dials with a seemingly infinite amount of caution and painstaking care. A low hum arose from the machine which soon increased to a roar as thousands of kilowatts poured over the cables and the great tubes lit up with an unearthly glare.

Then—wonder of all wonders—the crucible and the iron stand upon which it was set appeared to grow smaller. Then they appeared to recede into the distance, gaining speed as they receded for miles and miles. In a moment, they were apparently untold distances away, traveling at a stupendous speed, and yet plainly visible within the walls of our laboratory. Then they disappeared! But what wrung a gasp from me was the fact that the space where they had been within that weird hemisphere of glowing tubes had also disappeared, leaving nothing—nothing at all!

When I say "nothing," I mean absolutely nothing, not empty air space nor even blackness. Try to see out of the back of your head. You do not see blackness; you see nothing; in fact, you do not see at all. Well, that describes how the space where the crucible and stand had been appeared within the ghastly pale of the rays and lights focused by that awful hemisphere.

The Monster from the Other World

● I started wonderingly forward, only to be jerked back by Patterson.

"Stay back, you dumb-bell," he fairly shouted in his nervousness. "If you come within the influence of those rays, you will be translated into the fourth dimension or perhaps torn apart due to parts of you becoming fourth dimensional while the remainder of you stays here."

"We had better reverse it," Madison said. "It is eating up current at a terrific rate."

So the settings of the dials were carefully altered and the crucible with its stand reappeared, tiny and infinitely distant, falling toward us at a terrible speed through interplanetary distances, yet within the four walls of our laboratory. When it again appeared to be completely normal and at rest within our strange hemisphere of glowing tubes, the current was cut off and a moment later we were examining the articles which were apparently none the worse for their strange adventure.

"Now," Burnett said triumphantly, "we will show you something really worthwhile watching."

While I was pondering over what under heaven that something could be, he secured a cage containing a rabbit. It was sent through the machine into the fourth dimension and brought back safely and alive after a fifteen-minute interval.

"This," said Burnett, "proves conclusively that the portion of the fourth dimension, corresponding to where we are, contains air, a suitable temperature for life, solid ground, or some other surface upon which to stand, and a force of gravity which holds things down to that surface. We plan to build a larger machine and send a man through to explore."

The next day, we decided to close up our business and devote all of our time, energy, and resources to the work of constructing a new machine. We had to install a huge powerhouse of our own, and at a fabulous price, as our needs had far outgrown the capacity of the local plant and then there were numerous other difficulties and delays; but after a year of unremitting labor and expenditure, we completed it. I had thought that the other machine was a huge affair, but this one dwarfed it and contained several improvements over the old one. It contained a huge hollow sphere of vacuum tubes and inside of this spere was an iron platform

upon which the dimension travelers could stand and be transported into the fourth dimension with the platform.

When the time came for the great test, we decided that two of us should go while the other two remained to tend the machines. I had, by this time, been taught how to operate the controls, so I took my place with my three friends and we drew lots to see who should go. Burnett and Madison won the right, while Patterson and I, who lost, were to remain. Patterson seemed very downcast, but I must confess that I felt only relief; I have never pretended to be brave, anyway.

As Fate had apparently so decreed, our plans went through without a hitch; the pair were translated into the fourth dimension and returned to our own after a five-minute interval.

"Wonderful!" Madison exclaimed as soon as he and Burnett returned. "There is a whole world in the other dimension and it is lit by a blood-red sun."

"We shall return immediately with scientific instruments to measure gravity, air pressure, and other natural phenomena and take photographs, and shall remain for several hours," Burnett stated.

"The most remarkable thing," Madison continued, "was the total absence of life in any manner, shape, or form. In fact, the entire place seemed to be a barren mass of rocky crags and everything was bathed in a ruby red light shed by the glaring red sun."

The pair ridiculed Patterson and myself whenever we tried to warn them of possible dangers and insisted that we and not they should make the next trip. Although not without considerable spirited argument, for both Patterson and I were now burning with desire to see this strange alien world, it was finally agreed that they should go and that four hours after being translated to the fourth dimension, they should return to the platform and then in five more minutes, we would start the great machine that would bring them back to our own familiar world.

After a meal and a rest, we gathered together the instruments and cameras that they needed and the pair gaily took their places upon the platform. As I helped Patterson close the giant switches and set the dials, I felt an awful premonition of impending evil come over me, but I put it aside as unworthy and foolish. After they were gone, we certainly spent a nervous four hours waiting and discussing this strange new world and what they might be doing in it. The minutes dragged painfully, slowly; but finally, the time came and we adjusted the dials and closed the switches.

Then imagine our horror and consternation, for when the platform reappeared, it was *unoccupied*.

● After a short discussion, we decided to return the iron platform for five minutes and then bring it back again, as our friends may have miscalculated the time slightly. Then if they failed to reappear, one of us would have to enter the fourth dimension and search for them.

Upon the next appearance of the platform, we were, however, transfixed with amazement. Standing upon the platform was a huge creature like a winged dragon with a semi-human face and it was holding Burnett in one of its huge claws, while in another it held an automatic pistol that I recognized as the one carried by Madison.

The beast seemed to be as astounded as we were, for it dropped its captive and crouched down upon the platform and glared at us with a stupified air. It was about thirty feet long and stood about seven feet high. Its pair of giant bat-like wings projected nearly twenty feet into the air above its back and its huge body was supported by numerous legs. Each leg was about the size of a man's and ended in four large bird-like talons, the legs being arranged along its body in pairs, in much the same manner as those of a centipede. The monster's face and head seemed almost semi-human in shape, except that the eyes appeared to be larger and were a brilliant purple with big black

pupils and had a baleful and malignant glare in them. In fact, the entire creature seemed to give one an impression of utter, vicious, wanton wickedness of a type never before equaled in this world.

"Quick! Help! Do something!" came despairingly from Burnett.

I recovered from my stupor of fear and astonishment and perceived that when the monster dropped him, he had crawled off of the platform and out of the machine. Instantly, my brain, legally trained and made alert by many verbal jousts in court, reacted and I sprang to a cabinet where an automatic was kept. Even as I seized the gun, two shots rang out. The monster, whether by design or by accident, I do not know, had raised Madison's gun and sent two heavy forty-five calibre slugs through Burnett's abdomen. As I turned, I saw Patterson leap to the controls and commence setting the dials to hurl the accursed monster back to its own infernal dimension.

The creature now showed signs of desiring to leave the platform of the machine, so I risked breaking one of our delicate tubes and sent a shot into its front. Thereupon it hurled its gun at me and uttered such a marrow-freezing shriek that even now my blood runs cold at the memory of that awful unearthly cry. Then came the welcome roar of our mighty generators and motors picking up speed and the tubes began to glow with their weird light. Seemingly awe-stricken, the monster cowered down upon the platform, and a moment later, it had gone back to its own dimension.

We immediately went to Burnett's aid and I raised him up. Between choking spasms of coughing and vomiting blood, he told us that the other dimension was inhabited by hordes of these creatures. They had unexpectedly captured him and Madison and taken them to an underground city where, after carefully examining all of their equipment, they had vivisected Madison and experimented with him until he died and then dissected every fragment of his body. While they were still engrossed in the mysteries of Madison's body, Burnett managed to escape and return to the platform of the machine. We brought him back just as one of his pursuers leapt upon the platform and seized him; thus we brought the monster through also. He, further, informed us that the creatures were as far above man in intellect as man is above the apes and that they were evil and cruel, far beyond our power to even comprehend evil and cruelty. Thereupon, he begged us to destroy the machine, lest the monsters should find a means of coming through now that they were aware of our existence, adding that they could take our world and exterminate us more easily than we can exterminate ants.

A Tragic Climax

● We needed no more urging, for Patterson and I hurriedly smashed every one of the great tubes, melted in an electric crucible all of the smaller and more delicate parts and burned every plan and note concerning the experiment that we could find. Then we returned to Burnett only to find that he was dead.

"Well! Anyway, that's done and over with," remarked Patterson as he sank into a chair with a sigh.

"Yeah, but our troubles are probably just beginning. What are we going to say about him?" I asked pointing to Burnett's body.

Then I continued, "And you explain Madison's disappearance. There isn't a court on earth that will believe us if we tell the truth."

"Then it is too bad that we destroyed all of the plans, but I can make some more and a model that will conclusively prove our story," Patterson stated confidently.

"Yes, and give the secret away," I reiterated, "and then having a bunch of dumb-bells playing with the idea and bringing a horde of those monsters through to our earth. No, Patty, we must respect Burnett's last wish and never reveal the secret, not even to save ourselves from the electric chair."

"But what shall we do?" Patterson fairly wailed in his despair.

"Well," I said, "I have a plan that may work. We have several electric furnaces and crucibles that will melt almost anything, so I will destroy these two guns and all of the ammunition; then I will dismember his body, completely cremate all of its parts and then dissolve the ashes in nitric acid, so that no trace will remain. After which, I will clean up and dispose of the broken parts of the machine.

"Meanwhile, you shall devise from our remaining apparatus as complicated a machine as possible to study the effect of high frequency currents upon the molecular and atomic organization of solids. Burnett had some plans for such a machine among his papers and he built several when he first began to experiment.

"By the time we get all of that done, it will be morning. Then we will go and look for Burnett and Madison and when we don't find them, we will report to the police that they have mysteriously disappeared and offer a reward for news of their whereabouts. That should clear our skirts, but if we are questioned, we will say that we worked all night and that they were to relieve us in the morning. Then we will also show the machine that you will assemble between now and tomorrow, to bear out our tale."

I spoke rapidly, and as I talked, I gathered up the two automatic pistols and ammunition, broke open the cartridges and burned the powder from them in a small crucible. Then I reduced the cartridge cases, bullets, and guns to a puddle of molten metal in one of our electric ovens. When I turned from this task, I found Patterson still sitting in his chair staring at me.

"Well, you sap, what are you waiting for?" I demanded, "Get busy; we've got to work fast."

"But it is all so horrible and what you propose is criminal. I am not a criminal, so why should I behave like one? I have done nothing that should need an alibi," he stated.

"Oh! Indeed! Well, then suppose we just let you do all of the explaining to the police and, incidently, you can also—" My angry remarks were cut short by the wail of an approaching siren.

"Ye gods! Here they come!" I exclaimed, and then turning to Patterson, I continued. "If that is the police coming here, let me do the talking and remember that I am a lawyer, so you don't have to say a word; get that, not a word! Also, forget the shot that I fired at the monster. The only shots fired were the two that killed Burnett and the gun went back with the monster. See? If I get us out of this mess, I won't be a lawyer; I'll be a legal genius."

By this time the siren had approached very close and then stopped. There came a very loud and imperious knocking upon the main door of the laboratory building. I hurried out into the anteroom and opened the door to be confronted by two powerful-looking detectives and several uniformed patrolmen who pushed their way into the anteroom and then stood gazing suspiciously around.

"Wot's goin' on here?" one of them demanded.

I carefully inspected the individual who spoke. He was a large, stocky, flat-footed man with a red, overfed appearing face and an air of brutality and lack of intellect. His companion was a man of similar, but less pronounced, characteristics and appeared to be older. I had also noted previously that the first individual had addressed the other as "chief," so I coolly ignored my questioner and addressed the more elderly one.

"What do you want here?" I asked.

"The patrolman on this beat reported that he heard shots and screams here," answered the detective addressed, while the other showed signs of imminent apoplexy at my coolly premeditated snub.

"You must be mistaken," I countered. "My friends and I are carrying on a scientific investigation. Probably what your man heard was the sounds from some of our machines. Certainly, that is nothing to warrant a police investigation."

(Continued on page 366)

(Illustration by Paul)

Men and women were to be observed with heads three or four times as big as they should normally be, others had hands or feet half as large as their chests, while many, though well-proportioned on the whole, were giants seven or eight feet in height.

A VISIT TO VENUS

By FESTUS PRAGNELL

● **Mr. Pragnell, who is a growing favorite, gives us here a unique tale that turns out altogether different than you will expect it to from the beginning of the story.**

We are shown great changes that come over the life-forms of the earth during a comparatively short time. Normal human beings turn into horrible contorted monstrosities for no apparent reason—acromegaly. Many animals and vegetables become extinct and disappear completely from the face of the earth, while new, queer things suddenly appear from nowhere. What is causing this tremendous, inexplainable change? The revelation leads us into strange adventures on an alien planet.

● "It is no use raising false hopes," said the specialist, "you have acromegaly."

Augustus Loted, the noted multi-millionaire, heard this sentence of slow death without any visible sign of emotion. He had expected it. His sending for the specialist had been only for the purpose of removing the last trace of doubt, and the expression on the eminent physician's face had broken the news before he had uttered it.

"And there is nothing that can be done for me?" he asked, dully, as he rose from his chair and walked to the window.

"In the present stage of our knowledge, there is not much. But research is being carried on . . . . every week there is hope of an illuminating discovery . . . . your condition will take years to run its course—"

But the millionaire seemed not to hear. Wearily, he leaned against the frame of the window, and apathetically he gazed across the public park that his house overlooked. The most noticeable thing about that twenty-third century park, apart from the exotic plants and trees produced by centuries of selective cultivation, was the remarkable lack of proportion among the people in it: men and women were to be observed with heads three or four times as big as they should normally be, others had hands or feet half as large as their chests, while very many, though well-proportioned on the whole, were giants seven or eight feet in height. In the past, nearly all men had secretly longed to grow, to become as big as possible, but now people grew too much; they grew in ways they did not want to grow, and they could not stop growing. A nicely shaped body of about five foot eight or nine was now the most highly desired thing on earth, and a possession few people could boast of.

The cause of the trouble lay in a little body called the pituitary gland, found at the base of the brain and in the center of the skull. It has two lobes, the posterior and the anterior, and the anterior lobe controls the growth of the body; when it was insufficiently active, science could remedy the deficiency, but when it was overactive, making giants of children and causing adults to develop in unusual ways, there was no known way of correcting the trouble. The former condition was known as gigantism, and the latter as acromegaly, and both resulted in the loss of physical and mental activity and of sexual power. Through long ages of effort, mankind had nearly succeeded in its war against the disease-producing bacteria and their allies, the vastly smaller viruses, only to find this rare and curious condition developing into a menace that threatened to destroy it.

"It is the penalty we pay for proliferation," said the physician, joining him at the window. "When the laboratory production of food sent the population soar-

ing so that it increased twenty times in a hundred years, something was lost. We produce the known vitamins by intensive methods, but there must be some at present unknown vitamin which is essential to the pituitary gland. Our present knowledge is insufficient to support a population so huge, that, in spite of the efforts of governments, our numbers have steadily dwindled until they are less than half of the peak figure. This decline, due less to actual deaths than to the loss of sexual powers in victims, will go on until either the remaining people are forced back to more natural lives, or we learn to correct this condition.

"It was the legacy of Crowther, the millionaire cancer victim, to the cause of cancer research, that led to the control over that one-time scourge. Yourself, if you could be induced to take an interest, might give an enormous impulse to the investigations of the trouble you are suffering from." He stopped, suddenly doubting if he were being listened to.

"You don't believe," drawled the sufferer, "like some writers, that mankind will be destroyed by it?"

"No," briskly, "the balance of nature will reassert itself."

"Perhaps without a place in the scheme for mankind. What if the main sources of your unknown vitamin are extinct? Many species of plants and animals have gone out of existence in the last hundred years or so, and many more have come into being."

● After the catastrophic crash of the Parker group of companies, which suddenly pauperized many thousands of well-to-do families, Augustus Loted stood out, clear and unchallenged, as the greatest financier of the day. Indeed, none knew the full extent of his powers, for his operations extended secret ramifications into every phase of economic life. People still fondly believed that they were governed democratically, but the truth was that Loted dictated to every government in the world; for he had many ways of breaking obdurate politicians, whether they belonged to that bulwark of wealth and privilege, the Communist Party, or were the wildest revolutionaries. Many millions owed their living directly to Loted.

The fact that the "curse of the age" had had the temerity to attack this powerful man was naturally seized upon by news agencies and proclaimed throughout the world. The multi-millionaire gave two million dollars to the cause of research, and further offered a reward of half a million for any person discovering a cure. A flood of letters and personal calls followed from persons who needed only a little financial backing to enable them to accomplish this. There was a man who believed that he could do it by means of drugs to be obtained from the hardy vegetation that grows in the deepest crevasses of the moon; another who had discovered a spring of curative water in the center of the Sahara Desert, exact location unknown; another who wanted a hundred thousand dollars with which to build a machine to produce rays to do the trick; and one man wanted to breed a certain kind of tropical insect whose bite he thought efficacious. By no means the least wild were schemes for obtaining the necessary information from the planet Venus.

A few words concerning the stage that had been reached in terrestrial correspondence with Venus would not be out of place here. In 2028 were received the first messages known to have originated on Venus, but many years passed before intelligent communication was achieved, and the formula for that frightful explosive, Venusite, transmitted. Venusite is one of the more complicated carbon compounds, and derives its violent powers from the peculiarly unstable arrangement of the atoms in its molecules. With Venusite, it was believed that ships could travel not only to the moon, but actually from the one planet to the other. It was tried. A ship of brave men ventured out beyond the power of telescopic range, beyond the range of their feeble transmitting apparatus, out of the ken of their kind for-

ever. Another followed, and another, and another, and yet another, before a halt was called to this waste of human life.

About a hundred years after the departure of the first vessel, men began to become alarmed about the growing twin menaces of gigantism and acromegaly, and somebody conceived the idea of asking Venus what it knew about them. This rather absurd step met, at first, with encouraging success, for the Venusians declared that they knew all about vitamins, which it seemed were fundamental factors in life and constant throughout the universe; they knew what vitamin it was that we lacked, had it in abundance, but could not tell us how to produce it. Spurred on by the hope of bringing life-giving knowledge back to earth, many more brave men were swallowed up by the void.

Loted had all suggestions transferred to paper, and employed a staff of scientists to report on their feasibility. One or two of them contained discoveries that the writers had spent a lifetime of toil in achieving, and he stole these to augment his own fortune. "Success is not built upon scruples," he told a scientist who had objected, well knowing that he could hound the man to suicide if he spoke about it. Perhaps the most persistent of these would-be benefactors of humanity was Martin Harley, but as he refused to give details of his proposals, demanding a private interview to explain them, he was ignored.

A Strange Proposal

● It was about 2:30 one morning when Loted was awakened by the warning bell under his pillow. Somebody was stealthily climbing through the window. Instantly, the automatic precautions began to operate; for, though he secretly controlled a considerable force of gunmen, there were many men he had ruined who might take a desperate chance for revenge. Out of sight of the bed, the recess with its window was lit with invisible infra-red rays, throwing on the screen before him a clear picture of a young man, very roughly dressed and thin to a point that spoke of semi-starvation, with one leg over the sill. With a smile of grim satisfaction, the financier fingered the switch that would send the intruder into eternity; but, catching sight of the man's eyes, in which glowed the fire of genius or insanity, he held his hand. This was not any ordinary thief or murderer. Perhaps something useful might be learned from him before he was killed.

The instant the man was inside, steel bars snapped across the window, trapping him. Startled, he looked wildly round, flashing his torch.

"I see you, though you don't see me," came Loted's voice in the darkness. "Drop that torch and walk two paces forward, then twelve to the right. Disobey me and you will not live a second."

The intruder obeyed.

"You must be a brave man," observed Loted, musingly, still watching in his screen. "You seem to have iron muscles and a light frame, but still your climb to the window must have been a ten to one gamble with death, quite apart from the 12,000 volt current that is supposed to await such enterprising persons as yourself."

"I had to see you," said the man, gaining confidence, "and as you refused to interview me, I chose this way. In taking your live wires for bluff, I was right, but I see your other precautions are not bluff. I am Martin Harley."

"Your identity I had guessed. As for my precautions being bluff, if I chose to press the button of the Venusite pistol that I am pointing at you, you would know they are not, or rather, you would know nothing more. Tell me what you want to, but I warn you to be brief and interesting, or I shall end the interview in a particularly abrupt fashion."

Nervously, the intruder licked his lips and rubbed his hands together. "To a poor man like myself, invisible Croesus, life is not so pleasant that I should greatly regret losing it. Half starved always and

nearly frozen in winter, I am kept in just that bare existence accorded to those unable to support themselves in the crazy economic system ruled by such men as yourself. Yet I once had wealth."

Imperceptible in the dark, the financier's eyes hardened. Another word and he would know that this was merely another victim of his, seeking revenge. There were graves for such.

"My fortune," the man went on, "was dissipated, not as a result of your actions, but in an endeavor to help humanity, in perfecting the project I am about to put before you. I now know that only with the assistance of wealth can I hope to put it into operation. I need ten thousand dollars to finance a trip to Venus in a ship of my own design."

Harsh and abrupt, in the dark, sounded the financier's laugh. This was so simple, so crude!

"It's easy enough, I should think, to get yourself included in the next load of suicides. You will need something more subtle than that to get money out of me."

"I am hardly in a position, at the moment, to put my case in the best light, but being well aware of the monotonous tale of total disappearance that has ended every previous attempt to reach Venus, I have come to the conclusion that in every case the same mistake was made, namely that the project was known to Venus."

"You certainly are original there," admitted Loted, "you suggest the Venusians themselves destroyed these vessels. But why should they be hostile towards us?"

"Why should they not? They say that they have the cure for your trouble, for the world's trouble, but cannot transmit the knowledge. Frankly, I do not believe it, and I have built my ship to test my idea; it is very powerful and will carry two persons only, and is designed to set out and land upon Venus secretly. What will happen when we get there, I do not know, for the journey one way will absorb nearly all the Venusite, leaving us unable to get back without a fresh supply."

● Loted clicked his teeth and smiled broadly. This talk amused him more than anything had done for a long time.

"On the strength of that, you expect ten thousand dollars? You know, young fellow, there is one golden rule for success in life; my father told it to me and I will tell it to you, free, *gratis*, and for nothing. It is this. 'Never trust anybody, and treat every proposition put before you as fraudulent, and every person you meet as a swindler.' Every time I have departed from that simple rule, I have been stung."

"I can prove my honesty," cried the man, "I will show you the ship I have built, or if you fear a trap, an agent of yours."

"While we have been talking," said Loted, "I have been thinking. And I have made a decision."

"To throw me out or shoot me?" with a wry smile.

"No. To help you fit up your vessel and to travel in it to Venus as your passenger."

CHAPTER II

The Evening Star

● Airplanes transported the costly Venusite, the air-producing apparatus, and the stores to the hiding place in the Rocky Mountains. Then, one dark night, the little bullet-shaped vessel shot out across the Californian plains, then the side vanes turned her nose upwards, and she slid gracefully out of the atmosphere, off into space. She was a masterpiece of strength without weight, an eggshell full of separate compartments each constructed to seal itself hermetically if air escaped.

The oddly assorted pair inside enjoyed each other's company more than they had expected. After some days, when they were well under way, and nothing remained for a while but to keep steadily accelerating, they developed a habit of playing games together and of conversing in a cabin where the indicators were, at which Harley could glance from time to time to assure himself that all was well. Harley was the first to endanger this

peaceful progress by embarking on controversial topics.

"It seems strange to me, Mr. Loted," Harley said, "that you should give up all your comforts and luxuries for the discomforts and dangers of this voyage."

Loted altered his position in the comfortable arm chair that he had had installed for his own use, and knocked the ashes from one of his special cigars. With the fingers of a hand already rather large, he stroked a jaw that was getting longer. Then he answered.

"Perhaps it is not so surprising as you think. You see, I was about at the end of my tether, and would soon have had to give up those luxuries. For some time, things have not been going quite so well with me as I have pretended, and some of my little forgeries and other tricks must be found out soon. The crash was not far off. Actually, I am insolvent to the extent of about fifty million dollars, to say nothing about a lot of people who think they're rich, and who will have a shock when they find they're not. Oh, it's not a very unusual thing," he went on as Harley made no remark, "merely high finance. You and foolish scientists like yourself grow poor helping humanity while I wax rich and powerful by being utterly mischievous. It's the way the world is run, a queer way perhaps, but there you are."

He paused for a reply, but Harley remained silent and motionless, his piercing eyes fixed on the pseudo-millionaire. It struck the financier, suddenly, how like that thin, hard, sharp-featured face was to a cutting tool of tempered steel.

"So you see," continued the great man, in a voice from which the affability of the last few days had gone, "it was expedient for me to get away for a while. Now I have another home, a nice quiet little place, in a pleasant spot in the Holiday Islands, in England in fact, near the ruins of the ancient port of Southampton. There I shall be simply John William Barto, a man of ample but not excessive means. My family is already there, the money is there; money that, I need hardly say, should really go to my creditors; but Barto himself is not there, nor has he been seen. How to get him there puzzled me. But when you proposed your secret space-trip, it sort of cleared matters up; a little way out into space, staying away long enough to alter my appearance completely with the aid of a portable plastic surgery outfit, an unobtrusive landing in a wild part of an English forest among the bears and lions, and— well there you are, the few years of comparative health I have left spent in sport and hunting.

"Oh, I'm not afraid of your betraying me, for I shall still be able to pull a few strings. Breathe a word of my hiding-place and the police of any country will throw you in jail on some invented charge, if one of my gunmen doesn't get you in the back first; and if you keep quiet, I will pay you a reasonable amount for your services."

"I know nothing," admitted Harley, quietly, "about high finance. Such matters do not interest me; but I venture to remind you that when you entered this vessel, you started on a mission, and that mission will be carried out. You may settle in England some day, but at present, you are coming with me to Venus."

● Loted rose from his chair, his big frame seeming about to fall upon and crush the slight figure before him. In spite of the towering bulk of the one and the dried-up quality of the other, they looked at that moment strangely alike, two men of fixed resolve and inflexible wills. Loted had hacked his way through life by sheer dominant personality, was accustomed to command, to bending governments to his will; Harley had pursued one idea for nineteen years and had never budged from his purpose.

"Fool," said Loted, "do you think that I had not foreseen your resistance and that I am not prepared for it? Did you think I would accompany you in your mad suicide? At this moment, fool, you are unarmed. See this Venusite gun? With it, I could blow you out of exist-

ence, then pilot the ship back at my convenience. Yes, I have had instructions in landing space-ships. If you wish to live, stand up and walk into that room where you will be locked up until I choose to let you out. Stand up!"

But Harley sat still, quite undisturbed.

"Your description of me may be correct," he said coolly, "but the evidence you base it on is not, for I have never quite trusted you, and was prepared for some such move as this. Why brandish before me a weapon with which you could kill a sperm whale, when you have enough physical strength to do what you like with me? Kill me if you wish, my death would be quicker than yours, for you would wander about in space until you died of starvation or thirst; I have so mixed up the indicators and controls that only I can understand them. You know that the solar system is flat, all the planets on one plane? Well, I have deliberately wandered off that plane, and unless I remain in charge, we shall spend years in the void. Waste much time and our supplies will not last to Venus."

Loted had often been called a man of iron, but iron is cut by steel. Harley got his way.

The landscape of a strange planet! Who can forget the thrill, the emotions that assail one when he steps out of a space-vessel, and, after weeks of monotonous confinement, stands upon and gazes around at a world other than that in which one and one's forefathers were born? The habit of regarding this earth as the center of the universe, though we know it to be the contrary, is still strong enough to give us a distinct shock when first we see with our own eyes another world, just as apparently limitless and clothed with just as varied life, all without counterpart at home. In the sky is a sun of the wrong size and either red or blue according to the density and extent of the air. Perhaps, as on Jupiter, the air is full of flying things without wings; perhaps, as on Mars, the very shrubs make noises, weird and shrilling; perhaps, as on Ganymede, protective mimicry has been developed to such an extent that one never knows when any plant or stone may suddenly spring away upon one's approach.

And to Loted and Harley, as they stood knee-deep in the yellow moss that carpeted the low hill on the side of which they had landed and looked at the unfamiliar landscape, there were many other factors to fill their breasts with unusual emotion. The bright eyes of the fanatical Harley glittered with subdued triumph, while Loted looked like a punctured balloon under the unaccustomed experience of being beaten. Besides that, they believed themselves the first men ever to make a successful landing upon a strange world, except for our barren neighbor, the moon; and the prospect of returning was so remote as to be hardly worth consideration.

Almost entirely without incident, the journey had seemed to bear out Harley's contention that secrecy was the first essential for a successful journey to Venus. They were on a probably hostile planet, with a perfectly hopeless mission.

"Wish I'd shot you the moment I set eyes upon you," growled Loted. "This project is the maddest, the most ridiculous ever conceived of in the mind of man. It's my opinion, sir, that you are a lunatic, a monomaniac."

The Creatures of Venus

● As he had expected, Harley took no more notice of him than one does of the yapping of a stray dog. Perfectly impossible to annoy him with insults, he was a man of one idea, and it is doubtful if he had heard all the other's ravings. He stood now contemplatively gazing at the only animals of any size in sight, three beasts with round green bodies and four legs, one straight and tapering while the others were curved almost in a semi-circle. After a while, one realized that the short leg was a sort of beak or tube by means of which the group was poking about in the moss, probably feeding.

Abruptly, Loted turned and walked

away But Harley had not completely forgotten him.

"Where are you going?" he asked.

"I'm fed up with you," burst out the other, "with your silly ways and insane ideas. I'm going to broadcast a message to the ruling beings on this planet, saying who we are and throw ourselves at their mercy. It's the only way."

"You can try, if you like. I've already taken steps to make the apparatus inoperative."

Did the man think of everything? Every move he had planned was forestalled, prevented. How he longed to take the miserable, scraggy body and rend it to fragments! How he had underestimated him, a dangerous, cunning antagonist! But he had a queer feeling that in the energy and resource of the other lay his only hope of ever getting away from this horrible place; he was beginning to realize how helpless the most capable man is when out of his accustomed surroundings.

"I think," observed Harley, moving at last, "that it would be as well to do a little judicious exploring. We need more food and those green things may be good to eat. We had better take dark glasses to shield our eyes from this glaring light, hand guns with solid bullets for game; yes, and others with explosive missiles in case of danger. Although I understand that there are no harmful beasts or plants here, I like to be prepared. Also, seeing that the air here is so poor in oxygen and charged with carbonic acid gas, it would be wise to carry small tanks of oxygen on our backs for emergencies. Care to come?"

Loted growled his assent.

Cautiously avoiding the top of the hill, which would show them up in silhouette against the clouds, they walked around the side until they were in view of the extensive panorama beyond. It was one of the most barren, ill-favored spots of Venus, for vegetation was scarce, most of the ground being bare and rocky. Wherever it could obtain a hold, the feathery yellow moss grew, and sinister looking red blobs scattered about proved to be clumps of trees. Away to the right, a blue sea broke in a line of foam on a sandy beach, a long arm of water running from it, coiled round like a figure six. Round this inlet was an expanse of marsh covered with rank vegetation showing the gold, red, and brown colors of woods in autumn. Birds with leathery wings and huge beaks crammed with teeth flew above, shrieking harsh cries. At first glance, the whole valley seemed void of the usual evidences of intelligent creatures, buildings, roads, machinery, and visible cultivation.

Loted saw them first. "Mushrooms," he grunted.

Indeed, they looked very much like mushrooms, hemispherical white objects on stalks a hundred feet high standing out vividly against the various vegetations of the swamp.

● Walking on down the slope, the two passed through one of the red jungles and noted that the trees gave forth a sweet, sickly scent. Beyond it, they came upon a number of the green beasts browsing among the tall moss. While Loted was still wondering how to kill animals without heads, Harley fired at one of the nearest. The sharp report sounded like a brutal assault on the silence of the semi-wilderness.

The stricken creature gave several agonized leaps high into the air, then fell and lay still. Forthwith, the others bolted in long jumps, bending their jointless legs as a snake bends its body, except for the two companions of the fallen one, who stayed and felt the body with their yellow beaks. Seeing the two men, they leaped together.

Realizing that he was being charged, Loted fired at the hurtling green body, then side-stepped hastily. It turned in mid-air and almost fell on him, knocking the breath out of him. He wriggled from under the corpse and got up to see that Harley had accounted for the third.

With Harley carrying one of the bodies, they began to retrace their steps.

But now, the heat, the moisture-laden air, and the lack of oxygen were beginning to tell upon them; and, panting and grunting, they were glad to sit down and rest in the shade of the red jungle whose smooth branching stems rose, without leaf, bud, or flower, thirty feet above them. They did not know that few creatures that stop to rest in the carnivorous Venusian jungles live to tell the tale.

Harley yawned heavily. The sweet, musky smell made him very sleepy.

"Quite safe," he muttered, "rest here. Have it on 'thority Venusians themselves, nothing harmful on Venus; all 'sterminated long ago."

Loted wanted to remind him that what was innocuous to the natives of Venus might be harmful to strangers from earth, but the thought was too complicated to put into words. He sank into happy slumber. A soft contentment that he had seldom known in his hard life came over Harley. His immediate surroundings faded away into a world of dreams.

* * *

For how long he slept, he never knew, but presently he became aware of someone shouting. Something had gripped him tightly by one leg, but he took no notice.

The shouting persisted, a hoarse shouting, and the meaning of the words slowly forced itself upon his unwilling brain.

"Wake up, Harley! Save me!"

Why couldn't the fellow leave him in peace?

"Sit up, Harley, sit up and take a breath of oxygen, or we are both dead men!"

What was he talking about? What oxygen did he mean?

Throwing out one arm in a subconscious gesture, he touched the pipe that led from the tank on his back, and turned the tap. A stream of pure oxygen hissed out near his nose, scorching his lungs like fire.

He found himself tightly held round the legs and chest by snaky branches of the trees, and being lifted up by them. Carnivorous plants! Yet he had been told that such things were not to be found on Venus. Already his legs were cold and numb from lack of circulation.

CHAPTER III

The Venusians

● Wriggling desperately, Harley managed to slide his hipbone free and to get out his explosive pistol. In reaching for it, he touched another limb with his head, and it instantly whipped round his face, nearly stopping his breath. Blindly, for he was unable to take deliberate aim, he fired his pistol. Instantly there was a deafening crash and a fearful shock that was almost fatal; for the powerfully explosive bullet had struck a limb scarcely eight feet away from him. Splinters and drops of warm, sticky moisture struck his face.

He was falling headlong, Loted with him. He saw Loted strike the main stem and sprawl, apparently dead, on his face, then he struck the soft ground himself. Though it rendered him dizzy, he was not unconscious; but he might almost as well have been, for his weapon was now yards away. The persistent plant had not released him, and presently he was swinging aloft again. A large pad fastening on his breast, he felt the beginning of the suction that would presently draw all of the blood from his body.

At first, he thought that his eyes were deceiving him, for, as he hung upside down, he saw six of the most ridiculously complicated creatures hopping about with an absurd air of dignity through the gloom below; creatures with two bodies, one growing on a sort of stalk out of the other. As he looked, he saw that each individual was not one, but two, that a novel form of animal rode, standing up, on the three-legged beast as though the latter were horses. These newcomers, to whom the green things were obviously inferior, had egg-shaped bodies, red and purple, with no heads, one flexible leg ending in a round pad, yellow beak-like tubes, four in number, sticking out of

their middles; and two big triangular eyes at opposite points to each other, so that while one eye stared ahead, the other glared out at the back. Each had two arms like branching whip-lashes.

Were these the intelligent beings of Venus who communicated regularly with Earth? It seemed incredible, yet it was obvious that they had some intelligence. Hardly expecting any response, Harley shouted for help.

They stopped and looked up. For a while, they conferred together; then, reaching a decision, pointed upwards with some sort of weapon. Dense clouds of acrid smoke, smelling like burning flesh, arose. There was a crackling and sizzling and a screaming as of tortured animals, and Harley fell again to the ground, this time losing consciousness.

* * *

When he recovered, it was to find himself lying face down on one of the green beasts, held in place by its strong tail, and being carried in a series of leaps over the plain. His body was a mass of cuts, burns, and bruises, particularly his back, which felt as though he had been dragged feet foremost through the prickly undergrowth.

Warm drops of water, falling gently on his back, awoke him to the fact that steady persistent rain had soaked him thoroughly. Twisting his neck out of its cramped position, he caught sight of Loted, captive like himself, on a green steed.

"Woke up, have you," exclaimed the financier, who had escaped with little injury, considering. "Nice mess you've got us into now, eh? Wouldn't it have been better to have reported our arrival properly than to be caught like this? What chance do we stand now?"

Harley bit his lip. Indifferent as he had appeared, the great man's defection had hurt him deeply, and some of his gibes did find chinks in his armor. Craning his neck to see ahead, he saw that they were approaching the town that looked from a distance like a group of mushrooms. Up and down the tall stems hopped dozens of the unipeds, using steps that stuck out like large tea-spoons. They were very agile, and could turn in mid-air.

● Arriving at the town, the procession went on through the stems to where a particularly large building reared its head on three pillars high above the rest of the town. Here they were lifted down, and it was made plain that they were required to ascend. Expecting the frail branch to break, Harley tried it; but, though it bent under his weight, it held, and he went on to the next. Loted followed. Had he not been prompted by fear, he could not have gone up to that dizzy height, expecting every moment to slip, miss his leap, or break a step, and be precipitated to the ground. But at last, sweating profusely and gasping, he reached the comparative safety of the unrailed platform at the top and followed Harley inside.

"Pleased to meet you," said a low voice. Both men jumped and looked around for the speaker, but no one was there except a particularly tall uniped, over seven foot high, standing on the soft floor that was covered with what appeared to be a natural growth, and regarding them solemnly with his big, triangular eye.

"I see," went on the voice, "that you are incapable of telepathy, just as your planet would be incapable of interplanetary communication but for the power of our instruments in transmitting and their sensitivity in receiving. Among us, individuals who have no more telepathic powers than you, are objects of pity. I welcome you to Venus. There are many things we can learn from each other, but for the present, I see that you are tired and extensively injured. When you are rested and refreshed, we can talk."

Completely bewildered, the two men found themselves shut in a small room that was empty save for two bowls of a grey-greenish paste on the floor. They tried it; it was intensely salty and had a peculiar flavor, but was not altogether disagreeable. Realizing that they would have to eat it or starve, they drained the bowls.

"Didn't seem a bad sort," observed Harley. "Fine thing being able to understand him right away. Keep on the right side of him, and I can see our mission being completely successful."

"Yes," agreed Loted, stretched on his back, "but you know, old fellow, you must leave all the talking to me, for I am more accustomed to conducting negotiations than you are."

Before long, his opportunity came, for a small uniped suddenly flung open the door and beckoned them out. Waiting for them were the tall uniped and several others.

"We thank you for the hospitality," began Loted, "you have extended to us, and for saving us from the red trees. We have—"

"Cease your infernal babbling!" The forceful telepathic message crashed into their brains with the violence of a loud shout. "Treacherous, murderous beings! While I have been entertaining you here, you have been planning the death of my subjects. What is this terrible trap of which you told me nothing, and by which you have done to death my sons and daughters? Speak; tell me, or I shall have you cut to pieces where you stand!"

The complete change of face, so sudden and unexpected, took the space-travelers off their balance. They could do nothing but stare open-mouthed. For a moment, the angry Venusian seemed to search their minds.

"Do not attempt to deceive me by pretending surprise," he shrieked. "Tell me what you have done to them. Hardly had your vessel been found and brought here, and my own children, eleven of them, had gone to examine it, before cries of agony were heard. I received their telepathic calls for help. They have fallen, every one, with a feeling as of flames consuming their insides. How have you done this thing?"

In the Grip of the Tripeds

● Harley suggested he should go and see what was wrong.

"And make your escape? I have it; six of my guards will take you there, and this big, stupid man I will keep. Remember, my word is law, and if my children do not return alive and well, or if one dangerous weapon is found on the vessel —well, you will both be very, very long in dying. Take him!"

As Harley stepped out onto the platform, he looked down upon a milling mob of Venusians. As soon as they saw him, their fury beat upon him with an almost physical force, like a strong wind. The thoughts of one, stronger than the others, came to him: "There's one of the devils! Tear him into pieces!"

A staff cut from one of the red trees, slashing across Harley's bruised calves, stung him to action, and he followed the guards down and around the post.

"Back!" they ordered, upon which the crowd fled precipitately. One, a small one, seemed to have something wrong with his leg, for in his haste, he stumbled, leaped to his foot and stumbled again. Impatiently, a guard struck it with a staff, the effect of which was to make Harley suddenly feel ill, for the weapon sank a foot into the body and grey fluid poured out. The obviously dying Venusian began a low, wailing moan.

Some way off from the town and near the yellow sands of the sea, Harley saw the eggshell which he had designed and built, and which had brought him here from millions of miles away. That it had fared roughly in the hands of the Venusians was evidenced by a jagged hole in the side, through which the party entered. Once inside, Harley breathed deeply the delightful fresh air, to realize abruptly that it was too fresh. Around him the guards were making strange noises.

"Oxygen's leaking," he muttered.

Through several rooms, disordered by exploring Venusians, they went. The guards, despite their obvious distress, kept up with the man. They came upon several contorted corpses, then to a room heaped with bodies. An oxygen supply pipe ran here. The tap was turned on and the tanks were empty. The positions and attitudes of the torn and tortured

unipeds told their tale. Ignorant of the functions of taps, they had turned it and passed on until, with their breathing-tubes scorched by the life-giving element with which Nature has been so niggardly on Venus, they made a hasty retreat, past the open tap. As they reached it in their flight, they had one by one collapsed.

Nothing could be done. A Venusian, gasping painfully, grasped Harley's arm and pulled. A prophetic vision of his fate in the hands of the angry king came to him. The extra supply of oxygen had cleared his brain. His nerves and muscles were unusually quick and decisive, giving him ample energy and boundless confidence in himself. He would not be led, unprotesting, back to certain death. He struck with his free arm at the triangular eye of the creature that held him. To his profound surprise, it was softer than jelly, and his arm plunged deeply into the uniped's substance.

Appalled at this, to them, supernatural strength, the others were too startled to move, and Harley, realizing that he must now fight to the death, picked up a chair and despatched two more. But the other three were out of reach and raised weapons similar to those he had seen in action against the carnivorous trees.

A long period, or so Harley thought, elapsed while he stood waiting for death to strike from those deadly tubes. A tremendous roar filled the room and he was precipitated to the floor, his fall broken by soft bodies. So this was death, he thought, noting with calm, detached interest that he felt no pain. A moment later, he realized his mistake. Incredibly, he was not dead, but, amazing fact, the Venusians all were. Staggering to his feet and struggling across the swaying floor, he looked out of a splintered window to see that an explosion had wrecked the space-ship and hurled the fragment he was in high into the air. Possibly the escaping gas had found its way to the remaining Venusite and detonated it, or possibly some exploring uniped, escaping the fate of his companions, had reached the control-room and meddled inexpertly with the machinery; whatever it was that caused the explosion, he never found out.

● Now he was falling precipitately and stretched himself on the corpses to break, as far as possible, the force of the drop. When the shock came, it was less violent than he had expected, but left him plastered with unpleasant jelly. Through the hole where the window had been, water poured. He had fallen into the sea.

Unable to reach the window because of the force of the water, he pushed at the door; but it refused to yield. He tried the window again, unavailingly, then went back to the door. This time it gave, for the mounting water had increased the internal air-pressure, and like a cork he shot to the surface.

Swallowing a mouthful of water, he found it warm and very salty. It made his many cuts and bruises smart.

He struck out for the beach, not for the nearest point, but to the left, so as to have a clump of red trees between him and the enemy. Though his limbs were stiff, his body was buoyant in the brine, and progress became rapid. Before long, he touched bottom, being still some way from the beach. He would be lifted by a plunging wave, carried forward, then stand and struggle against the backwash. Something soft and sticky brushed him and stung painfully.

Landing at last, he found himself hidden from the town, and the only visible evidences of the unipeds were several of their three-legged steeds who were watching him with such wide-eyed curiosity that he wondered whether they would be able to tell their masters of what they had seen.

Clearly, he must find cover. But before he could make the journey to the dense vegetation of the swamp, the only place he knew of where a man could hope to hide, he was certain to be discovered. He almost wished he had not tried the long swim there. His badly treated body would not keep on much longer without rest. If

only the three-legged beasts would carry him as they had before! And why not? They responded to telepathic orders, that he knew. Why should they not obey him as readily as their regular masters? He would try it.

Concentrating his mind on the nearest, he endeavored to make it come to him. At first he was unsuccessful, then he noticed that it was uneasy, looking all round; another effort, greater concentration, and it came hesitatingly up to him. In a second, he was on its back, directing it to the marshes. There was no means of holding on to that broad back, and he soon found himself falling off; but the animal must have realized his difficulty, for it raised its tail and held him in place.

Making a wide detour, he saw that the explosion had wreaked havoc on the mushroom town, the big, three-pillared building standing among a mass of ruins. Fervently hoping that none of the Venusians hopping about beneath would see him, Harley flattened himself out as much as possible, and urged the beast to hasten. Suddenly, though, a number of mounted unipeds came charging out of the heaped wreckage. They had seen him!

"Hurry!" Harley commanded his steed, but it hesitated and stood still. After a moment's cogitation, it turned and went to meet the approaching Venusians; for it obeyed its familiar masters, refusing to heed Harley's desperate commands. The tail that had kept him from falling off, now gripped like a vice. He was helpless.

CHAPTER IV

In the Swamp

He struggled and beat at it with his fists, but it only increased its pace. He wished that he had something that would serve as a weapon, but everything had been taken from him or lost but a broken watch and a lead pencil. A fragment of glass cut his finger. Snatching out a jagged piece, he began to slash at the gripping tail. Suddenly he found himself released and falling.

Jumping up and making a desperate dash for the bushes, he felt waves of air, hot as from a furnace, beat upon him, and smoke arose from the ground. Soon there was a thin veil of scattered plants between him and his pursuers; then he was altogether hidden and his feet sank into the soft ground. Still he ran on. Once he tripped over an outcropping root and fell headlong; another time he came on a wide, still pond and was obliged to stop. There was no sound but the stirring of the wind in the branches and the splash of some small creature dropping into the water and swimming away in fright. Ahead of him probably lay dangers as great as those behind. Numerous small things scurried about, any one of which might be poisonous. Quagmires into which he would quickly sink to his armpits lay among the shrubbery, awaiting a too hasty step.

Without his noticing it, the light had faded rapidly. Night was falling. Twenty-four hours before, for days on Venus are only 35 minutes shorter than on earth, he had first landed on this planet. What a lot can happen in a day!

There was no hope of creeping up in the dark and rescuing Loted, for, climbing a tree, he saw a bright light in the direction of the wrecked town, proving that the unipeds had some form of artificial lighting. He would rest for an hour or so and look again. Gathering a few armfuls of moss and making a rough couch, he laid down in the middle of a clump of bushes and was soon asleep in the absolute darkness of the warm Venusian night. Once, roused by a slight noise, he saw moving lights near by, but he lay perfectly still and they passed on.

Scurrying across his face, something warm and furry, fleeing from something larger, woke him again. It was now day. He had slept through the night. His limbs were stiff and he was furiously hungry. Could a man find anything to eat in a Venusian forest? The branches were laden with fruit, something like plums, that had been extensively gnawed by animals or insects. Was that any reason for thinking he could do the same? He decid-

ed it wasn't, but the only test was to eat them and see. They tasted watery and sharp but not disagreeable, and in sudden desperation, he made a good meal of them.

Feeling somewhat better, he walked out into an open space. Sounds of the bending and snapping of branches warned him that something was coming, and he ran for shelter just as a group of green beasts came into view, each animal carrying in its tail a dead Venusian which it laid upon the ground near Harley and left. At the end of the clearing, they paused and sniffed around inquiringly, then raced off at greater speed.

A loud flapping of wings made him look up. He saw a company of gray bat-like birds, with bodies eight feet long and wings thirty feet from tip to tip, settling down in the clearing. Quarreling and fighting fiercely amongst themselves, they began to tear at the bodies with their terrible teeth. One of the smaller ones somehow incurred the displeasure of a larger, who promptly slew it with several blows of its beak, then began to devour the body. Soon nothing remained in the clearing but the wings and beak of the eaten bird and gray stains that had been the life-blood of the Venusians.

This, then, was how dead bodies were disposed of here. Harley came out of his concealment, prompted by an uneasy desire to know what had caught the attention of the beasts. At the end of the clearing, the place where they had stopped to look around was clearly indicated by the trampled ground; and, running directly to it was a line of human footsteps. They were Harley's own footsteps, and the beasts had seen, understood, and gone to inform their masters.

Straining his ears he could hear the dull *plop, plop,* sometimes accompanied by a splash, that the round pads of their feet made when in a hurry. The chase had been resumed, and now there was no hope of nightfall putting an end to it as it had done before.

Not for long could he hope to avoid being caught by those springing, racing forms; his only hope was to hide his trail in water before he was seen. He fled in the opposite direction, seeking hard ground, undergrowth, anything that would hide those tell-tale marks, doubling and using every trick he could invent; but those ominous sounds were very near when he came without warning upon the arm of the sea that ran through the swamp and promptly plunged in. Caution made him work his way along through the still water under the shadow of overhanging plants for about a mile, then he struck out for the opposite bank. Somewhere in the middle something sinuous seized his leg and tried to pull him under.

Emerging from the water, he walked across a flat expanse, his feet sinking deeper and deeper with each stride. Realizing that he was in a morass, he turned to go back; but his feet had sunk nearly to the ankles and he could not pull them out. With all his strength, he strained at his right foot. It came out with a loud squelch but the effort had driven the left in nearly to the calf. He tugged at that and only succeeded in embedding the right again. He now saw that the yellow surface here was not the same moss as in other places, but merely a thin film over blue-black, clutching mud that stank of all the abomination imaginable.

Embedded to his knees, he gave up his useless struggling and tried to think his position over calmly. Overhead, tantalizingly out of reach, was a strong bough by means of which, could he but get hold of it, he might yet pull himself out. With a great effort, he managed to get the tip of a twig between the tips of his first and second fingers; pulling down cautiously, he drew it towards him until he had it fairly in his hand, then — the twig snapped.

Now that hope was gone, he lay back and spread out his arms so as to present as wide a surface as possible. How deep was this pool of mud? Perhaps it went on down for miles; and maybe, when all the present life of both earth and Venus had passed away, geologists of some future

age might find his fossilized bones far down and argue that mankind lived on Venus before coming to the earth. His body was so deeply impressed that it took a desperate wrench to enable him to stand up again. This trick of lying down enabled him to gain time, but the mud must win in the end. To be drowned in mud! He thought he could face drowning in water, that was almost natural, but the thought of this stenching stuff flowing into and choking his lungs made him shudder.

However, he soon saw that he would not live to meet that fate, for two of the gray birds, scavengers of the marshes, had seen his helpless position and flew to the feast, great jaws agape. Even the unipeds were preferable to this, and he screamed aloud for help.

Leathery wings flapped near his head, and dagger-like teeth snapped at his eyes. He dodged and beat at them with his hands. The birds quarreled and bit at each other in dispute over his body, and one was driven away, dripping gray blood. The other resumed the attack on the helpless man, now sunk to his thighs.

It dropped one wing as though about to strike with it; but the blow was not delivered, the wing hanging helplessly instead. Smoke was rising from where the wing joined the body; and the helpless bird fell onto the marsh, fortunately out of reach of its intended victim, to be instantly seized in the inexorable grip.

Harley turned to see who had so opportunely come to his rescue. He expected to see unipeds, but instead the welcome sight of his traveling companion, looking rather wild with clothing singed by fire and plastered with mud, met his gaze.

"Loted!" he called.

"Hello, Harley," said that man. "You've got yourself into a nice pickle. How am I to get you out?"

"You can't. Leave me; if you come closer, you'll sink in yourself."

"Nonsense. I don't want to be left alone in this unsavory world. I'll find some way. What about that branch above you? Perhaps I could crawl along that."

New hope came to Harley. "Yes, you might be able to do that."

Out of the "Zoo"

● Struggling up the tree, which was not easy to climb, Loted wriggled along the branch. It bent under his weight, but not far enough for Harley to reach. Presently, the two met, and Loted, bending down, seized the other around the waist while Harley took hold of the branch and pulled for all he was worth. Slowly, reluctantly, the clutching mud let its victim go and Harley struggled out and crawled to safety.

They looked at each other.

"I thought you were blown up," said Loted.

"And I thought the unipeds had killed you."

"It was like this," explained Loted. "When you fired your mine — I don't know how you did it, but it was a rattling good idea—the house I was in rocked like a fir-tree in a storm. The door of my cell was broken open, and I saw that the one-leg outside—their bodies are quite soft, and seem to have no bones—was dead. Taking his heat-ray and those of several others who were lying around, I went into the room of the big one-leg. He bolted when he saw me coming in with the ray-guns, and I wriggled through a crack in the floor and, finding that most of the houses were blown down and their inmates killed, slid down a post. A few survivors hid among the ruins and potted at me, but I won and got away to the swamp. Since then I've been wandering about until I heard you yell and knew you were still alive. It sure takes a lot to kill you, Harley."

"What of you? Judging by your clothes, some of their shots must have come near making an end of you."

"Well, they didn't. The only question I am interested in at the moment is, have you found anything good to eat?"

"Yes, the berries on some of these bushes are edible. And that reminds me,

I've got a most uncomfortable feeling in my stomach. Gosh, that *was* a spasm."

Harley's digestive organs could make nothing of the unfamiliar substances that had been thrust upon them, and presently he was seized with a fit of vomiting. Weakly, he tottered away with Loted to a dense thicket on high ground where they were secure from observation, even from above.

"I don't think I'll try your plums," said Loted. "I had the same experience when I killed and cooked a small animal with a heat-ray, so I know what it's like. What now? Stay here until we starve and the birds eat us, I suppose."

"I suppose so," muttered Harley, gloomily.

The sky was an endless dazzling white, the dense cloud-layer of Venus, in which the position of the sun was shown by the added brilliance of that region. That body was sending down heat and light nearly double what earth receives, and though the blanketing clouds shut out much of it, they prevented the heat from escaping and kept the planet in a state of close, damp heat that was extremely trying. In the marshy forest, not a leaf stirred. The jungle seemed to wait patiently for the deaths of these beings who had foolishly ventured among the perils of an unfamiliar and hostile planet. Harley fancied that he could almost feel the gaze of a hundred hungry things waiting for the feast.

Heat and hunger, combined possibly with unfamiliar substances in his system, played tricks with Harley's eyes and brain. Before him, a mist was rising from the ground, swirling and eddying and wreathing itself into strange shapes. In the middle of it, a large round eye appeared and gazed at him in calm, reflective fashion; and around the eye, the mist shaped itself into an apparently solid body. It had two legs, similar to, but more slender than, those of the unipeds, and its oval body was draped with a purple material on which were many designs; otherwise it was much like the unipeds.

● Into Harley's mind came the idea of gentle amusement, as though they were being laughed at, then a telepathic message.

"I do not admire your manner of welcoming one who has come to rescue you, aiming a ray-gun at me. However, I do not advise you to use it, for, while you cannot harm me, you might start a fire from which you would have difficulty in escaping. Actually many miles from this spot, I am using a thought-projector to throw my picture into your minds, so that you think that you can see me."

"Who are you?" demanded Harley.

"A representative of the rulers of Venus."

"Then the unipeds—?"

"Like their green beasts," said the vision, "and the red trees, they exist only in this one spot, which we keep as a zoo. It was unfortunate that you should land in this very place, but really, you know, you have only yourselves to blame, for you tried to keep your visit secret, and no arrangements were made to receive you. Seeing you land in the very worst place you could have chosen, and watching your subsequent adventures has been the biggest joke Venus has enjoyed for years."

"You have been watching us?"

"The whole time, in telescopes, and the show has been relayed to every native home on the planet. But our telescopes are more complicated than anything you have conceived; you would call them television sets. We thank you for an excellent entertainment, and in return, we rescue you from your troubles. Leave your guns on the ground and follow me."

Some subtle force from the figure made them obey unquestioningly as it led them, now floating several inches in the air and now with round feet hidden beneath the ground, through the marshes. On the way, they crossed a glade where three unipeds who were following Loted's tracks, mounted, as usual, on green beasts, bolted in terror from their guide. At last, reaching an open space where the ground was firm, they saw before them a cube,

twenty feet each way, seemingly of porcelain the color of new leaves. There was a door in it beside which stood a creature similar to their guide, wearing a red robe.

Half expecting the whole mirage to vanish, Harley put a tentative foot inside. It was certainly material. They entered. Forthwith, the bushes and trees and all the varied life of the swamp dropped away below them, for so perfect were the driving machines that one was unconscious of any movement. Now they were looking down on the valley with its coiled arm of sea and shattered mushroom town. The landscape trembled, hesitated, then began to flow steadily to the east.

Within the cube was one compartment, and the green walls, though opaque from outside, were transparent from within; beneath their feet, far below, was the sea, so clear that looking down produced unpleasant sensations of falling and vertigo. The three Venusians tending the green metal machinery in the center of the floor ignored the earthmen completely, even when Harley tried to question them.

It was impossible to judge how far they had traveled when at last they came upon a land green with fertility, and landed.

"Am I dreaming?" demanded Loted, suddenly gripping Harley by the arm. "That tree looks exactly like an earth-oak to me."

"It *is* an oak," said Harley, "and there is a maple, and a fir. See that? That was a rabbit, and there's a pigeon."

"We shouldn't starve here," murmured Loted softly, "and personally, I should like to get away from these things who are looking after us. I don't altogether trust them. Are you game to escape? I believe we could open the door and slide away before they missed us."

Harley assenting, they casually pushed open the door and walked quickly but quietly across genuine grass as on earth. In a few moments, they were concealed, and looked back to see the green cube sliding softly as a soap bubble into the sky.

"We were meant to get out here," said Harley.

"So it seems," agreed Loted.

CHAPTER V

Human Guinea-pigs

● Pushing their way through a regular thicket of laurel, they came with startling suddenness upon a path running around a plot of cabbages set out in neat rows. Beyond the cabbages, a field of blue-flowered potatoes peeped at them through currant bushes.

"Some earthman planted these," declared Harley.

At that moment, a white-haired man, inclining to stoutness, appeared, walking thoughtfully along the path towards them. He wore a suit of an old-fashioned cut, so patched and darned that it was nearly falling off him.

"Pleasant weather," he observed. "These confounded rabbits play hell with the cabbages."

They now observed that he carried a hoe in one hand and a cunningly contrived snare in the other.

"We are strangers here," said Loted, "only just arrived."

"Indeed?" said the stranger, looking them over. "Yes, come to think of it, I've not seen you before. All I can say is that you've got your clothes into a nice mess already. What are they going to be like when you've been here thirty years, as I have?"

"Can we get food and drink here?"

"Have you got any money? Otherwise you'll have to give me an I. O. U., for prices rule rather high here, you know."

It happened that Loted was well provided with currency notes, but Harley had to ask for credit. Payment having been made in advance, their host led them to a medium-sized bungalow of bricks and stone, and soon laid a meal before them; a meal lacking in many of the luxuries to which Loted was accustomed, but at the moment, he was not disposed to be critical.

"The only drink here, I am sorry to

say," said their new friend, "is water. Though we all, at times, sigh for those three dear old curses of earth: alcohol, tobacco, and tea, I am sure we are better without them, especially tea. Since being forced to the frugal fare of Venus, we have all been free from the dyspepsia that troubled us on earth. If ever I got back I should lead a big campaign against tea, cause of half the ills man is heir to.

"There are some annoying inconveniences that we have to put up with," he went on chattily. "For instance, we cannot produce glass, and have to be content with holes for windows. Fortunately, however, the climate is usually too hot for windows."

"Are there many people here?" queried Harley, his mouth full of stewed rabbit.

"About thirty, all male. Every time a space-ship sets out for Mars or Venus, it finds its way here in the end, but the kind attentions of our Venusian masters prevent our numbers from becoming unwieldy. They intend to colonize earth, and keep us here for purposes of experiment and observation. Oh yes, they are taking a long time about it. They say that the whole scheme of life on earth has to be altered before they can get a secure foothold.

"They work in secret, and don't intend to lose any Venusian lives over the business, if they can help it. It seems that the various forms of life on a planet are so interdependent that no high form can flourish without a myriad of lower forms to support it. Quite apart from the food question, there are bacteria, viruses, and even smaller things than that, without which man could not survive beyond a generation, and the same is true of the Venusians."

Harley explained earth's trouble with gigantism and acromegaly.

"Probably one of their minute cultures is the cause of it. They try them on us. Then, if they prove successful, they introduce them to earth. I understand that their method is to carry spheres full of spores and drop them into the atmosphere. The spores are practically indestructible and the containing spheres are so light and fragile that they sink slowly, and the wind rends them to fragments in the denser strata of the atmosphere. Thus they are slowly establishing Venusian life upon earth. Some die out quickly, some last longer, but they tell us every step, for they do not conceal their plans from us. Makes others easier. Foundations are steadily being laid. Even the larger things are now engaging their attention. Already, several earth species have been destroyed, and one or two Venusian plants firmly established."

● "My God, you are right!" exclaimed Harley, leaning back and staring at him. "I have only this moment realized that the pear-tree we passed on our way to this house is the first living one I have seen for years! That mysterious disease, Yellow Canker, destroyed them all. To find a healthy one on Venus! Now I remember reading an article by a scientist in which he remarked on the exceptional activity of Nature in the last century or so in evolving new plants, many of them without any apparent relationship to previously known species. And that swamp, didn't you notice it, Loted, that some of the smaller plants were familiar, though I was too occupied at the time to realize it."

"Plants first," said their host, "then animals. And the next step—" He spread his hands.

After lunch, he led them to a small room without windows, the floor, walls and ceiling of which were lined with lead.

"This, my friends, is the only place on the island where we can talk without fear of being heard and understood by the Venusians in the machines they use. While outside, I always pretend to be helplessly resigned to the plans of these beasts, but here I can reveal my plans. Earth shall not succumb without a blow being struck for her. I know for a fact that nothing they have introduced to earth will long survive in competition with the natural life of the planet; cut off the supply and they will disappear one by

one, till about a hundred years will see the last of them die out. And there is a way of stopping the supply. Yes, there is a way of destroying the Venusians and of bringing the domination of earth to Venus. Yes, sirs, there is a way, and I—I have found it. They breed strange, deadly forms of life, but two can play at that game, sir; two can play at that game! I have evolved a monster!"

He glanced furtively about, then continued in a hoarse, excited whisper.

"Yes, I have created a terrible thing. It looks innocent enough and peaceful; so peaceful! But its powers! Its bite is poison; it breeds rapidly; it will burrow through the ground and through the walls of their houses; it will devour their crops and their food; it will break the power of Venus!

"Now, when I take you out and show them to you, mind, you reveal nothing of your thoughts in your faces and gestures. For we must be circumspect. Circumspect. They must never suspect Earth's reply to their schemes before the time comes."

Blowing out the smoky oil lamp, he led them into the garden and showed them a stone pen down into which he invited them to look through the wire mesh. Hardly daring to breathe, they approached, and saw—running about within and heedless of their presence—six white mice.

They smiled and winked and nodded, after the fashion of people sharing a great secret, then wandered away in search of more congenial company. Soon they found another man, old and stout as the first, to whom they talked and told their story.

"So you've been talking to the Chief Biologist, have you? Of course, though we call him that to please him, he is really quite mad. And hardly any wonder, either, when you remember that he's been here thirty years; the longest I have ever known anyone to remain sane here was twenty. Everything else he told you is correct, for he is fairly lucid on almost anything except those silly white mice of his.

"Now there is one thing I must tell you. Mind, I am not annoyed with you, I recognize that you are strangers here and sinned in ignorance, so I am prepared to overlook it; but in the future when you speak to me you must address me as, 'Your Majesty.' I happen to be King of Venus. All the Venusians do as I tell them, and I hope to establish a dynasty and maybe extend its realms to include Earth. As to this business of Venus colonizing the Earth, I gave orders for that to be stopped long ago."

They apologized to "His Majesty," and departed.

"Is there no sane man here?" groaned Harley.

"Unfortunately, yes," said a voice from the other side of a loganberry bush. "I believe I am one."

The speaker proved to be a man in a wheel-chair. The hands resting on his lap were little more than skin and bone. His face presented the shriveled, dried-up appearance of age, yet the eyes were those of a young man.

"Why, Harley," he croaked, "my old chum, Martin Harley! How do you come to be in this place of despair?"

Desperate Plans

● Startled, Harley recognized Grumbolt Lowther, who had been the football captain in the same college in which Harley had been educated.

"We set out for Venus," said Lowther, "some twelve years ago, hoping to help humanity; but we have become instruments of evil instead. They take each of us in turn, try this culture and that on him until they find something harmful. Only a few of our original crew still live, and those have purchased their right to exist at the cost of their sight, or hearing, or sanity, or a multitude of unpleasant sores; every man something. Tell me, has this trouble of mine appeared at home yet?"

"Not to my knowledge," said Harley, but Loted was better informed.

"A disease with symptoms similar to yours has shown itself on Earth," he declared. "I know because I floated a company to market a cure. But it has not obtained a real hold. Patients usually recover after awhile."

"Thank Heaven for that." The sufferer closed his eyes for a moment in relief; then he went on: "How delighted we were when we found ourselves nearing Venus, and a huge, semi-transparent octogon ship met us, informing us that we were the first travelers to make the journey! They asked us to follow them, promising a grand reception; and presently we found they could communicate with us without the aid of any apparatus on our ship, by means of those cursed telepathic machines of theirs. Then we discovered, too late, that we were helpless to resist the directions they transmitted in this manner, and, compelled to disembark here, we found an earth colony already established, and saw our vessel taken away. Since then we have been little better than automatons. We grow our food and live our lives on this island, but we are watched the whole time, and none of us knows when the summons may come for him to walk away to one of their green cubes to be carried to their laboratory and experimented on. We are even afraid to plan resistance, for we never know when they are reading our thoughts."

* * *

Loted and Harley were accepted into the melancholy little community, the earth colony of Venus. Heroes all, at one time, some of the boldest spirits earth could produce, who had voluntarily offered their lives in the great adventure, they now dragged out a miserable existence, hopeless, apathetic prisoners of Venusian masters. On the island, which was some fifteen miles in diameter, without power or machinery, and niggardly supplied with metals, they lived simple, primitive lives, all their energy expended in feeding and sheltering themselves. They lived for their dreams of the past, tired men waiting their turns to find rest in the cemetery that slowly spread on the side of the hill. The supply of seeds and young plants and animals was replenished from time to time by the Venusians, for the second generation of Earth life on Venus lacked vitality, as did men who had been there for many years. How these supplies were obtained without the knowledge of Earth was a mystery . . . .

The colonists kept up a semblance of a social system in miniature, based on the money they happened to have with them. There was a Legislative Assembly and a Court of Justice where such important questions were tried, as: Was A entitled to construct a fowl-house in such a manner as to keep the sun off B's washing?

Some grew potatoes, others wheat, others dug clay and baked bricks: all sold their commodities and purchased what they needed from the others. Thus, money fulfilled its purpose as a medium of exchange and passed from hand to hand until coins were worn smooth and notes illegible. There had been some discontent over the unequal distribution of wealth, but after the fortunate ones had spent a day or so in idleness, this righted itself, for their money was spent and they had to set to work like the rest. One individual had cornered soap, but the whole community went without washing for several days and the price of soap came down.

● Harley, having no money, went to work in the brick works until he could achieve independence. Loted revealed the large supplies of notes he had planned to take to England with him. There was enough to support him in comfort and idleness for many years, and he looked forward to a life of ease supported by the labor of others; but the other members of the colony put their heads together and enacted a law whereby the Rate of Exchange should be one hundred and fifty dollar notes issued after 2247 to one dollar, gold or paper, issued before that date. Thus the value of Loted's money was drastically reduced, the risk of heavy depreciation of the original money avoided,

and the power of finance, for once, defeated. Loted waxed eloquent about the Iniquity of Deliberate Class Legislation . . . .

● "Personally, I don't believe it," said Harley, without pausing in his work of stacking the clay blocks for burning.

"Believe what?" asked Lowther, maneuvering his wheels to get around a tuft of grass.

"The phenomenal powers you ascribe to these Venusians. I admit that they can see us from a distance, that they can influence man's actions while far away, and you have convinced me they can read our thoughts when we are near their machines; but I refuse to believe that they know everything that passes through our minds when we are far from those machines."

"Don't work too hard, old chap, or you'll soon have made all the bricks we want, and then you'll be unemployed. I don't believe it myself."

For a while, Harley worked in silence.

"What about trying to escape? I know it will be dangerous, but what if we do lose our lives in trying? We have little enough to look forward to."

"Steady, old chap, there's plenty of time. Most of the men are cowards, but some of us, five in all, think as you do, and are ready for the attempt. I will undertake to be responsible for you, and to let you know our secret plans. Can you vouch for this man, Loted?"

"I can."

"Very well. We never meet together more than two at a time lest we attract attention. Now listen to me. Sooner or later, either Loted or yourself will be taken to the Experimental Laboratory. Until your coming, we were beginning to fear that one of us would have to undergo the experience a second time, but you have eased our minds in that respect; for a while, at least. Not very far from here is a building like a huge chimney, like those chimneys one sees in ruins of old factories on earth, only far larger. It is built upon a hill and its summit rises far above the clouds, supporting a platform larger than a square mile on which the laboratory buildings are situated. I was there some years ago, when I contracted this complaint of mine, and as I was being brought back, this is our secret trump-card, I managed to take away the pistol of one of the Venusians without him noticing it; for, clever as they are, they are sometimes guilty of what, in a man, we should call absent-mindedness. This is our plan: when the green ship comes, the member of the committee who sees it will go to the apple tree nearest this quarry, and near the trunk he will see a ring in the ground. Pull up that ring and the pistol will be seen lying in a tin box.

"That pistol gives forth putrefaction-rays when the button is pressed. You will understand the effect of it when I tell you that I killed a rabbit with it and the body was as though it had been dead a week. Once we can get to that elevated laboratory, there is a room in it housing the controls of the interplanetary transmitter. I saw a Venusian operate it by closing a switch similar to what sets the green ships in motion. We can get to that room and send a warning to earth."

"I hope I am next to go," cried Harley, his eyes aflame. "I shall carry that pistol."

"You will do nothing of the sort, for they will read your intentions in your brain before you enter. No, we must capture a green ship, pilot it there, then make a surprise attack on them."

"You have possessed this deadly weapon for years," said Harley, thoughtfully, "yet you have made no move till now."

"Do not judge us too harshly, old man; most of us are sadly incapacitated, and there is something in this place that saps the energy and will of a man; as you will know in time. We sadly needed a fresh influx of life and spirit."

He wheeled himself away. Harley passed on the information to Loted, and a period of monotonous waiting began for the Committee. It was a pathetic committee; one was blind, one deaf, one had valvular disease of the heart and might fall dead at any moment, and the last had

but one arm, his other having dropped off bit by bit.

Days passed. Meeting Loted near the beehives, Harley spoke to him without getting a reply, then saw that he walked unseeingly, like a man in a trance. The "summons" had come to him.

The period of waiting was at an end, the time for action had come! A glance at the sky did not reveal the green cube, but doubtless it was there, hidden by foliage. Searching hastily for other members of the Committee, he found the one-armed man and the blind man.

"Unfortunately," said the blind man, "I am but little use in a fight. In my day I feared nothing, and it is the same with most of us. But I will be there; you two take the gun and I will tell the others."

A few moments later, Harley lay on his face among the currant bushes and watched the open space where the cube always landed. In the middle of the field stood the unconscious financier, waiting to be carried away.

CHAPTER VI

Warning the Earth

● Noiseless as thistledown, the beautiful, polished vessel drifted to a resting-place before them. Dimly through the walls, they could see the machinery inside, and the three oval-bodied Venusians tending it.

"Will the ray operate through the walls?" whispered Harley, anxiously.

"They will come out," returned his companion. "Better let me have the gun; I have practised with it and know how to focus it so as to bring down our quarry without killing the man as well. If I can, I'll miss him; if I can't, he'll be unlucky."

True to his predictions, the three Venusians came out and stood by the open door. Harley thought it an insolent gesture of power to expose themselves so recklessly.

"You could get them all now," he murmured.

The one-armed man muttered imprecations. "I'm trying to, but I can't get the gun to work. I can't understand it."

A sleek, beautiful wood-pigeon, sailing in graceful ease to a landing before them, suddenly crumpled in the air and fell in an untidy heap.

"The ray is working, all right," said Harley in a tone of utter despair.

"I might have known it," groaned his companion, "the chemical structure of Venusian bodies is so different from ours that this weapon is designed to have no effect on them. No wonder they never troubled about our possession of it when it would harm only ourselves."

As the green vessel floated away, perfectly unharmed, he cast the useless pistol from him and rose up among the currant bushes. He was weeping with the abandon of a child.

"I hoped, before I died, to see earth strike a blow at the dominance of Venus, but now I know that I never shall. Soon the mortification that has robbed me of my arm will reach my heart. And I have clung to life, fought to live, for this day—to be disappointed!"

* * *

Of all this, naturally, the abducted financier knew nothing. Perfectly conscious and aware of his surroundings, his body was out of his control as it carried him, against his will, to the landing-field; it was not until the Venusians had arrived that he realized what was happening. Expecting every moment to see them collapse, he struggled against his rebellious muscles to keep back out of the way of destruction; but nothing happened. He had a few unpleasant moments when he knew he must be in the line of fire; then, cursing in his mind the cowardliness of the dilatory committee, he was being carried to unknown perils, to be a subject for fiendish science. Terror, terror of the unknown possessed him, like the fear people have of a first operation under anaesthetics, but unhappily without the comforting assurance of the good intentions of the surgeon.

Still he was able to take an interest in his surroundings. In a minute or so, they

were above the cloud envelope, bathed in blinding light and looking down on a white floor that stretched limitless in every direction and looked as though a man might walk upon it. It was hard to believe that this was not the real surface of the planet. Many miles of this monotonous expanse they traversed, until they came to the landmark so often described to him, a slender pole rising high out of the clouds, with, at the top, a platform bearing buildings.

Marvelling, he stared at this unbelievable feat of engineering. The advantages, for the purposes of astronomy, of its position he realized at once; but he wondered what happened to the precarious structure in the event of a violent storm or an earthquake; it was so extremely top-heavy. So clearly did he formulate the question that the Venusians perceived it and replied by telepathy.

"A storm," they told him, "would affect only a relatively small portion of the staff, and would hardly be felt; while in the event of an earthquake, the staff would not sway as a whole, but the shock would travel upwards, giving those at the top ample warning."

● As they approached, Loted saw that the first appearance of smallness and slenderness had been deceptive, for the platform had an area of more than a square mile, the support being proportionately huge. Still guided by that mysterious influence, he stepped out of the cube and walked over the rough surface to the buildings. Extremely rough floors seemed to afford good foothold for the wide pads that were the feet of these creatures, but made it hard work for the financier, who was breathing heavily by the time he completed the half-mile to the center building of the elevated village.

"Enter, creature of Earth!" It was a deep bass voice and woke Loted sharply to alertness. Two of his conductors seized his arms in their whipcord tentacles and guided him through a door which promptly closed, shutting them out.

He looked around. It was a lofty, spacious room, lit with red-tinted light, with ridges running across the floors and many ornamental pillars. Three purple-robed Venusians awaited his arrival.

"Approach," said the bass voice. It *was* a voice, and came from a corrugated sounding-board on his left. Obeying without hesitation, he advanced towards two machines suggestive of searchlights, from one to the other of which stretched a pale blue haze. When he reached the exact center of this haze, a sharp command directed him to stop. Now he could feel his mind being pried into, and knew that his conscious thoughts were open to inspection. Accordingly, he concentrated on the idea of how great and powerful the Venusians were, for he was a tactful man.

"We thank you for your compliments," said the voice. Loted wondered which of them directed the reply, but they had a deceptive appearance of taking no interest in him or in anything else, of doing nothing. They ignored him as completely as they did the perfect working model, wonderfully made, of the Solar System, that spun, unsupported and unheeded, over their heads.

"We were particularly interested in you," went on the voice, "because you are a living example of the effect one of our preparations is having on earth. We see that your body is growing out of shape, and that the condition is gradually weakening you in a way that will ultimately be fatal. However, it will not prevent us from making use of you."

Sweat broke out on Loted's brow, for to the last moment he had hoped that he would escape the usual fate. "Do you mean to use me for your experiments?" he asked hoarsely.

"Certainly. You were not asked to come here and you must pay for your footing. You may not die as a result of our activities; there is quite a chance that your condition may be fatal before our efforts are."

"Wait a moment. I am an important man on earth. I may be useful to you."

"How can you be useful to us?"

"By describing to you the ways, the weapons and the resources of earth."

"Your treachery would be idle. Already we know more about that than you do."

It came to him in a flash of inspiration, the way to save himself.

"There is some important information I can give you," he cried.

Now he knew that he had them interested. "What is this information? We see that you genuinely believe it to be important to us."

"Can you cure my acromegaly?"

"If we wish to."

"Do you promise to cure me, not to experiment on me, but to allow me to live in comfort, even to protect me from the vengeance of my fellows, in return for the information?"

"If it is important, we will."

He described the plans of the committee, named the members, told of the possession of the gun, and described its hiding place. One of the three Venusians went out.

"As it happens, the plot would be harmless, but for their temerity in imagining such a thing your Committee men will all meet a particularly unpleasant fate in a few hours. Enter that room on the right."

Something snapped in Loted's brain. These things were double-crossing him. A man accustomed to treachery, who broke faith as naturally as other men eat, he knew from the mocking undertone, the subtle flavor of triumph in the thought waves that reached him, that his captors meant to dishonor their words. A black flood of fury filled his mind, driving out all fear, all reason. He leapt madly at the nearest Venusian.

A Final Act

● Now every intention that came into his mind, every plan he formed, was revealed to the Venusians by the vibrations of the machine, so that they always had notice of what he was about to do. Had he harbored the slightest thought, the slightest desire to attack them, they would have known and been on their guard. But now, by the merest fluke, by the mere fact of conceiving his rage and acting on it at the same instant, he achieved the seeming impossible: he took the bipeds by surprise. It was a possibility that they had not foreseen, as completely an accident as the falling of a tile from a roof onto some one's head, that a man should act entirely without meditation.

Seizing a whipcord tentacle in one hand, he wrenched at it, and swung blindly with his other fist at the body he pulled towards him. His hand burst through the skin with a soft *pop*, and gray fluid poured from the eyes and breathing-holes. Turning on the other in the same instant, he aimed at it a furious kick that threw him backwards, the mutilated corpse on top of him.

Both Venusians lay dead, and Loted, still holding the arm he had torn away from the body of the first, looked at them and at the spreading stains and wondered what had happened. There was a frightful pain in his left arm, and he vaguely remembered seeing the aiming light of a ray-gun resting on it for a second. It smelt—vile. From mid-forearm down, his arm was dead and putrefaction was well advanced.

Reason told him that a man could not live for more than a minute or so with a limb far gone in decay, for the blood would carry the poisons all over his body.

Revenge! He had a few seconds to revenge himself by wreaking all the harm he could on these things. The interplanetary transmitter! He would warn the Earth!

Madly he raced down the corridor, following half-remembered directions given him by men who were now doomed to death by his own act. Abruptly he found himself before a great mass of apparatus. The switch! He found and closed it.

He did not know the interplanetary code, but that didn't matter, for he could speak in English, trusting to the operator at the other end to make a record of the sounds if he did not know that language himself.

(Continued on page 367)

(Illustration by Winter)

Pencill saw the air around Tyme's body suddenly vibrate.

THE RETURN OF TYME

By A. FEDOR and HENRY HASSE

● Here, at last, is the long-awaited sequel to "The End of Tyme" which appeared in our number for November, 1933; that time-travel burlesque that you liked so well.

You will remember that, in the original story, Tyme, the visitor from the twenty-third century, was thrown into an asylum for declaring that he had traveled in time, but he mysteriously escaped.

In the sequel, we find that B. Lue Pencill, the editor-in-chief of "Future Fiction" is very despondent—in fact, so much so that he is about to end it all—for the depression had taken its toll on his beloved publication, and he wanted to die before the magazine.

But we also solve the mystery of Tyme's sudden disappearance from the asylum, which greatly affects the situation.

This story will amuse you even more than "The End of Tyme" and proves a fitting sequel.

● Late on the afternoon of April 12, 1934, a person walked into the private office of B. Lue Pencill, Editor-in-Chief of *Future Fiction*. The editor was surprised and not a little curious, for this person was none other than John S. Mith, D.T., Head of the Department of Science at the John Bopkins University.

Professor Mith lost no time in explaining the purpose of his call, and once he had started speaking, he did not stop until he had said everything he wanted to say.

"You will no doubt be surprised, Mr. Pencill, to learn that for nearly five years I have been a constant reader of your magazine, *Future Fiction*. I am also a steady reader of another magazine of the same type, *Stupendous Stories*. It is not generally known, but this type of fiction has always been peculiarly fascinating to me. But a year and a half ago I began to realize that scientific fiction was on the decline, and I was sorry. It continued on the decline, so I began immediately to write a novel, the idea for which I had had in mind for some years. All of my spare time and energy for the last year and a half has gone into this novel, and last week I finished it.

"Now I firmly believe, Mr. Pencill, that this novel will be *the epic* of all science-fiction stories of all time. In fact, it is bound to start a new era in science-fiction writing. I have it with me now, 80,000 words, and the title of it is 'The Core.' I wish you would read it. I think that you will not only agree that it fits your magazine, but that you will be most enthusiastic about purchasing it for immediate publication. I think you will find that it will increase your circulation 100 per cent.

"I left this story with the editor of *Stupendous Stories* last week and called for it today; he offered me outright 3c per word for the magazine rights. You may wonder why I did not accept. The truth is, Mr. Pencill, I would very much rather see this story in *Future Fiction*. It is a much nicer magazine from the standpoint of appearance—better paper, print, artists, and so forth. However, I do believe that *Future Fiction* has for the past two years printed the worst science-fiction of any magazine. I am being perfectly frank with you. I want to help you and your magazine, Mr. Pencill. I am offering you an unparalleled opportunity to raise your publication 100 per cent in circulation, not to mention 1,000 per cent in the opinions and good will of your readers. You see, Mr. Pencill, I have the utmost confidence that my story will do just that.

"The editor of *Stupendous* thought so too, apparently, for he remonstrated ex-

ceedingly against my submitting 'The Core' to any other magazine than his own. But, Mr. Pencill, if you are in a position to also offer me 3c per word, the story is yours; otherwise I shall be compelled, much against my will, to let it go to *Stupendous* at that price. But I think that together we can bring science-fiction out of the rut and can elevate your magazine to the highest place in science-fiction literature.

"I wish you would read 'The Core' thoughtfully, and in a week I will call again to hear your decision."

After this long speech, John S. Mith, D.T. placed a portfolio on the desk before the dumbfounded Pencill and, with a final "Good day," left.

● When the editor had sufficiently recovered, he burst forth into speech which was a bit stronger than vociferous, to say the least. Of all the inimitable gall! Three cents per word indeed! If he paid 3c per word for an 80,000 word story, he would have to postpone publication of *Future Fiction* for six months, or forever! Of course, publication of the story would increase the circulation more than somewhat; the name of Professor Mith alone would be sufficient reason for that. But 3c per word—$2,400 for one story!—was beyond range of Pencill's conception.

Nevertheless, he took the manuscript home that evening, having decided to read it, if only to see whether or not the professor's colossal confidence in it was justified. Seated in his favorite easy chair, Pencill turned his attention to the thick manuscript. The title, "The Core," immediately aroused his curiosity, so without further ado, he plunged straightway into his task.

A very pleasant kind of task indeed, Mr. Pencill was aware before very long. He read nearly a third of the manuscript that night, continued to read it at the office the next day, and for the second night took it home, where he finished it.

Pencill was amazed. He was stupefied. It was all Professor Mith had said, and more. It was the most stupendous thing Pencill had ever read. "The Core"—the core of worlds—the connecting route of all the worlds on all the other planes, higher, as our plane is the lowest; the natural passage between our Earth and, simultaneously, the worlds of all the other planes aforementioned; intangible as the ether, yet capable of being traveled; constantly shifting over the surface of our Earth, sometimes fading into non-existence, depending upon the natural conditions; caused in part by vibration and the gravitational attraction of the moon and of any other planets which might have any stress on the particular side of Earth where the Core is existent at the time; shifting, fading, existent under only the most delicate conditions, going on the blink when the hero wishes to travel it most, so that he has to wait for the natural conditions to return to the Core.

Nor was the story subordinated by the science. The plot was unique, thrilling, tense. Pencill was more wildly enthusiastic over it than he had ever dreamed he could be over any story. To merely say that it was "great" would be like calling the Grand Canyon "cute." It was a new kind of science-fiction. It was science-fiction revolutionized. It was cosmic in its scope, yet at no time beyond comprehension. Pencill could now well understand Professor Mith's meaning when he had stated that this story would start a new era in science-fiction writing.

But after his immediate enthusiasm had somewhat waned, the editor became very sad. *His* magazine would not be the one to lead in this new era. For the first time there dawned upon him the realization that he could not possibly, by any stretch of his present financial status, buy that story. He needed no careful estimate of *Future Fiction's* finances to know that it was hopeless to hope.

● Nevertheless, the next day at the office, he looked carefully into his private books. And then it was that he was plunged into utter despair. Things were very much worse than he had imagined.

He had enough available funds to pay about one-fourth of the price of "The Core." He wasn't thinking of that story now, though, but of his magazine. He could issue it for a few more months, perhaps. It was certain that he couldn't finish out the year, as he had hoped. By then, he had thought, conditions would surely have improved; business would have begun to come into its own again. He had been hard hit by the depression, of course, as had everyone else. But he hadn't dreamed subscriptions could drop so low. He had realized that there was gradually approaching a crisis, but hadn't thought that it was so near.

So *Future Fiction* was finished. Forgotten now was "The Core." Forgotten now was everything but the fact that he had founded a magazine a long time ago, had put much money and much work and much hope into it. And now it and he were to fail. He didn't understand even now how it could have happened; he thought he had always done his best.

He looked back, tried to see how this had come about—looked back to the first, reviewed the good years, the fair years, the not-so-good years, up to a period just six or eight months ago. Those last six or eight months were particularly outstanding in his mind. He had never before encountered such a bunch of unappreciative readers as he had in that time. They seemed to take an unholy delight in voicing their many grievances in "The Reader Shrieks." But Pencill took none of them seriously. Readers didn't mean half of what they said, of course. Pencill had always printed as many of the letters as he had room for, the praises and the pannings alike; he prided himself upon being that much of an editor.

As he looked back now, he could see that one particularly vociferous reader had started the whole thing by again raising the cry that is a bane to every editor's ears: "We want reprints!" (Often Pencill would awake in the night, sweating, from the awful nightmare of those words.) He remembered now that he had printed this vociferous reader's letter, together with a footnote in which he explained the utter financial impossibility of reprints. Such stories, he explained, were copyrighted, and the cost of reprinting even one of them would necessitate leaving out all the other stories he already had scheduled to appear. The majority of the readers wouldn't like that, and besides, the authors at present writing for *Future Fiction* had to live, though he never explained *why*.

Pencill had hoped that would hold him.

But this particular reader was witty—oh, very witty. He had a snappy comeback for every occasion.

"You're only the editor," was his vociferous retaliation on this occasion. "Who are you to say what the readers would like? They would rather have one reprint each issue than five or six of the kind of stories you have been giving us. And speaking of the authors at present writing for *Future Fiction* having to live, I understand from reliable authority that they get paid scandalous rates; that is why *Stupendous Stories* gets the best stories, and you get the worst. Yours defiantly, ————. P. S.: The trouble with you is that you always evade the issue."

Yes, said Pencill to himself after reading this one, I'm only the editor — and straightway took half a box of headache tablets.

He had printed this letter too, he now remembered, for he had rather liked the fellow's courage in saying straight out what he meant. In the footnote after the letter, he had dismissed the whole thing in a few cursory words.

Which was his mistake. Things then rather broke loose.

"Evading the issue!" the readers cried, taking sides with the one who had started it. Everyone had seemed to think that it was his particular duty to send in his protest to "The Reader Shrieks." The thing had finally died out and Pencill had gone on printing the stories by "the authors at present writing for *Future Fiction*."

● Pencill sat in his office now, thinking over these past years and months. The magazine he had founded, raised, and

nurtured had always seemed something more to him than an inanimate mass of pulp; it had been more like an intimate friend. And now it was as though that friend were going to die, were going to leave him alone and friendless.

And then came the Great Thought. It came like a flash and Pencill lost no time in acting. With an air of finality, he walked to the door of the outer office. It was past five-thirty and everyone had long since gone home, but very silently he closed and locked the door. Retiring into his private office, he silently locked that door also. Now that the Great Thought had come, he could see that this way was best. At least, the magazine would outlive him, for within a very few minutes he would be no more . . . .

He put "The Core" back into the folio, penned a brief note of appreciation to Professor Mith, and placed it with the manuscript. That done, he opened the top drawer of his desk and gingerly lifted out a blue steel automatic which he had made it a habit always to keep there. He wasn't very adept at handling firearms and wondered which was the proper way to do that which he was about to do.

Delicately, but with much resolution, he pointed the muzzle in the general direction of his head. He really meant to pull the trigger—for he was very sincere in his purpose—but he never did.

For, the very instant his finger tightened, there appeared to be some sort of disturbance of the air directly in front of him, accompanied by a queer kind of humming. Pencill hesitated for one instant.

And in that instant Tyme "arrived."

Did you ever see a man suddenly materialize out of the thin air directly in front of you, directly on the spot where you had been looking at nothing the instant before? If not, you must try it some time. It must be a very astonishing spectacle. That's what happened to B. Lue Pencill, and it so astonished him that he immediately forget about suicide; and suicide is a very hard thing to forget about immediately, especially when you are about to commit it.

The editor's arm dropped to his side and he said nothing. This was very appropriate, for he had absolutely nothing to say. He was thinking, though. This reminded him very much of a similar occasion some time ago; on that occasion he had been menaced by a lunatic in this very office. In fact, this fellow who now confronted him looked very much like that same lunatic.

On the floor beside Tyme was a large, tall bundle.

Tyme spoke first. "I hope I did not startle you, Mr. Pencill. The last time, if you remember, you did not witness my actual arrival, so believed me a lunatic and had me placed in an asylum. This time, however, I think you did witness my arrival, for you were looking directly at me when I materialized."

"Yes," Pencill replied, not the least bit of concern in his voice, "but I was a bit startled. I recognize you now by your voice. You are that same lunatic who related preposterous stories to me in this very office some months ago. At that time I had you placed in an asylum, but you managed to escape and have probably been running loose ever since. And furthermore," the editor went on recklessly, "I do not care to listen to any more of your stories today. I don't know how you got in here this time, any more than you did last time; but do you realize, young man," —motioning with the revolver he still held in his hand—"that you interrupted a very important event?"

But Tyme did not heed Pencill's words, if indeed he heard them at all, for his attention was now centered upon the automatic the editor held, and which Tyme recognized as one of the ancient weapons.

"Tell me, Mr. Pencill," Tyme began anxiously, "that weapon you have in your hand — revolver, or automatic I believe they called them. Were you about to—to—"

"About to use it?" Pencill broke in. "My dear Mr. Tyme, or whatever your name is, I was indeed about to put it to

very good use. If you wish to leave, I will unlock the door for you. Or you may stay if you wish, though I imagine the sight of a man shooting himself isn't exactly a pleasant one."

Tyme was aghast. Suicide was virtually an unknown art in his time, and that a man should wilfully want to take his own life was very hard for him to believe.

"How very fortunate that I decided to come back!" he exclaimed. "How very fortunate that I arrived just when I did! But of course, I couldn't have arrived at any other time, could I? You, alone, about to commit suicide, the doors locked, and no one else present to prevent the act —so indeed it must have been no one else but myself who stopped you, for the act *was* prevented. Of course you didn't shoot yourself; you see, it didn't happen that way. You went on living; you continued to edit your magazine!"

"What nonsense!" exclaimed Pencill, now very much convinced that this person was indeed a lunatic. "Continued to edit my magazine indeed! It won't last another three months; that's why I'm ending it all. I don't want to be bothered by your nonsensical stories, young man, and if you think that you or anyone else is going to stop me from doing this last thing, you're very much mistaken. Stand back, young man!"—as Tyme took a step toward him. With that, Pencill again raised the gun to his head.

● "Mr. Pencill! Wait! Please, just one minute!" Tyme was so very much agitated now, his voice rising to a queer falsetto, his hands gesticulating wildly, his expression so ludicrous, that Pencill would surely have laughed had not the situation been so serious. "I implore you, Mr. Pencill, to listen to me for just one minute. If you do this thing, it might upset the whole Universe! Countless lives, countless worlds are at stake! You lived until 1950—I think it was that year—at which time you were killed in an auto accident! You see, it didn't—it mustn't—happen this way! Stop and think—think what might be the results of tampering with the delicate Scheme of Things! Stop and think of the countless upon countless of millions of suns and planets in space. Stop and think of them swerving, speeding, crashing, all because of the pressure of your finger upon that trigger! Stop and think of the Universe wiped out! Stop and think of the cataclysmic destruction! Stop and think of the cosmic chaos! Stop and think of the terrible responsibility that is yours! Stop and think of all—well, stop and think!"

– Pencill stopped to think.

Indeed, Tyme's words reminded him very much of one of his authors, Hamil Edmondton. But in spite of himself, Pencill was impressed with the great power, the great responsibility that was in his finger. Slowly, awedly, he lowered his arm. Now that Tyme's words had begun to penetrate his consciousness, he began to realize the widespread cosmic destruction his folly would have caused. Really, his nature was such that he wouldn't purposely harm a single hair on the head of the lowest Oog that crawled on the farthest satellite of Jupiter. He shuddered to think of what he had almost caused.

Tyme sighed with relief, too, at the narrow escape they had both had. For, of course, he wouldn't be born for some 300 years yet; and with all those suns crashing about, the Earth would surely have been destroyed, and with the Earth gone, he could *never* be born.

"I almost forgot!" exclaimed Tyme then. "So anxious was I to save the Universe from ruin by your thoughtless act that I forgot that I have here the very proof that I am from the twenty-third century, and not a lunatic as you seem to persist in believing." He then placed on the editor's desk the large bundle he had brought with him.

"Just one moment, Mr. Pencill, and I will give you very definite proof that you continued to live and edit *Future Fiction*."

Swiftly Tyme opened the bundle, and there on the desk Pencill saw a huge stack of yellowed magazines.

"There!" cried Tyme triumphantly. "There you see a stack of magazines that

haven't yet been printed—whose stories haven't yet been written!—whose illustrations haven't yet been drawn! There you see a stack of *'Future Fictions' between the years of 1934 and 1942!* Surely you will believe me now, for you edited those magazines! See, here is your name on the first page."

Pencill picked up one of the magazines and gazed in stupefaction. The date on it said December, 1941. The pages, though yellowed and ragged at the edges, did not crumble at the touch as might have been expected, but were very limber and pliable. They had been thoroughly coated with a very thin layer of some transparent substance. Liquid cellophane, Tyme said.

The stories in this issue were unknown by Pencill, so he laid it down and picked up one dated June, 1934. That would be just one month later than the current issue, he remembered. It looked not much different from the issues of the past few months, he reflected. He thumbed through it, greatly intrigued, seeing there one or two stories which only that morning he had assigned to the next issue—which hadn't yet gone to press, but which he now held in his hand!

Then he came across something rather strange. Halfway in the magazine, between the end of one story and the beginning of another, was an insertion. It was a single page of smooth cardboard—an announcement of some kind. He had never made announcements in that way before, Pencill thought swiftly; it must be very important. Then the words jumped out at him—gigantic words, in letters two inches high:

THE CORE!

And below, in smaller type:

Readers! Attention! We cannot find appropriate words, nor enough words, to tell you of the tremendous experience that is about to be yours. For the past five years, Mr. B. Lue Pencill, Editor-in-Chief of *Future Fiction*, has held a secret which is probably not known to a single science-fiction fan; namely, that a very great man has long been a reader of *Future Fiction:* none other than Professor John S. Mith, D. T., Head of the Department of Science at the John Bopkins University. Two years ago, acting under the continued urgency of Mr. Pencill, Professor Mith agreed to write a story for publication in this magazine. That story, "The Core," is now in the hands of Editor Pencill, and he wishes to say that never before has he read anything like it; to say that it is "great" would be like calling the Grand Canyon "cute." It is bound to start a new era in science-fiction writing. "The Core" will not appear in the next issue, or the next. But in the September issue we will present the first of four instalments of "The Core." During the intervening two months, we are going to launch a vast advertising campaign; every person who ever read a piece of science-fiction in his life is going to be informed of the coming of this masterpiece. *What is the CORE?*

What is its purpose? But ah! You must wait two more months and you will know all!

When Editor Pencill had read this announcement, his surprise was more than somewhat. He could not imagine himself paying $2,400 for one story! Frantically he looked through the pile of magazines. There!—September, 1934. Eagerly he opened the pages and could hardly believe his eyes. There was the first tremendous instalment of "The Core," by Professor John S. Mith, D. T. Then—that meant that he *had* bought the story! $2,400! Good heavens, how could he have been such a chump!

● He glared wildly about the office and his eyes fell upon Tyme, standing nonchalantly by. "But I won't have it!" Pencill exclaimed, waving the magazine in the air. "It's—it's preposterous! I—I absolutely refuse to buy the story! The idea! No, by gad, I won't do it!"

"But Mr. Pencill," put in Tyme mildly, "don't you see that you must have purchased the story? I do not know which story you mean, but you must have purchased it and printed it if you see it printed there. You can't reject it, any more than you could have shot yourself a while ago. Otherwise, tampering with the Great Order of things, think what might happen!"

Pencill remembered what might happen, and shuddered.

"Well, it was—is—a tremendous story. I should like very much to print it, but

where did—will—I ever get the money to buy it? I was—am—about bankrupt—"

Tyme shrugged. "I know nothing about that. I would suggest, Mr. Pencill, that you just let matters take their course; you must have reached some sort of agreement with the author of that story. I would also suggest that you keep these magazines, to guide you in your selection of stories for future publication. Accept only the stories you now see in these magazines, as they come in, and reject all the rest. Which of course must be, as it happened that way."

"That is a great idea!" exclaimed Pencill, as he visioned the great ease with which he would be able to edit the magazine in the future. "And I thank you for allowing me to keep the magazines. And by the way, Mr. Tyme, you didn't say what was the reason for this visit. Allow me to apologize now for the very rude way I received you the last time. I'm afraid I was rather a fool."

"That's quite all right. The only reason, indeed, for this return visit was to convince you that I am indeed from the twenty-third century, and this I have done by bringing these magazines back to you. Besides, I rather enjoy jumping from my own century into the past; it is indeed a unique sensation, both the de-materializing and the re-materializing. I shall perhaps visit you again, Mr. Pencill, in the near future. And now that my purpose has been accomplished, if you will excuse me, I will be going."

As Pencill looked on in interest, Tyme stepped into the center of the room. With the utter unconcern of an experienced time-traveler, he pressed in quick succession a number of buttons on the flat box at his waist. Pencill saw the air around Tyme's body suddenly vibrate. The body grew dimmer, seemed to expand; then with disconcerting suddenness, it was not there.

Dazed, as though just awakened from a vivid dream, the editor turned again to the desk. But it had not been a dream. There were the magazines. Pencill, with a sudden revival of interest, began to arrange them in order, from the most recent date, June 1934, to the latest, December 1941. The file was not complete, he noticed with a pang of regret. Nearly two whole years were missing, those of 1937 and 1938. He wondered if the magazine had been discontinued those two years, but thought it most likely that Tyme hadn't been able to secure them. He hoped Tyme would bring those missing numbers next time he came—if he came at all.

His disappointment was short-lived, however, as he began to look through the future issues of *Future Fiction*. At first he noticed many familiar authors; in the rest of the 1934 volumes were stories by such established authors as Vincent Harll, Hamil Edmondton, Nach Schatner, R. F. Strazle, Richard Tucker, Ray Munn Gallon, Klar Kashton Smith, Lawrence Banning, the beloved doctor-author David K. Eller, and the mysterious Enondapamis E. Snoops, B. V. D. Pencill observed these names with pride; they had been contributing to *Future Fiction* for a long time. Then, in the September issue was the first instalment of that masterpiece, "The Core," by Professor John S. Mith, D. T. For four glorious issues it ran, and from the few letters Pencill read in "The Reader Shrieks," the readers seemed to be overwhelmed by the power of it. They wondered why they hadn't been given this kind of story before. They demanded more like it.

Next Pencill began to look through the 1935 and 1936 volumes. Then it was that he indeed began to realize the revolutionary effect "The Core" had had—would have—on science-fiction. Other authors, particularly the younger and newer ones, were quick to comprehend. They realized that stories like "The Core" were going to replace the old, worn-out type of science-fiction. These younger writers were quick to follow the example set for them. They had a fresher outlook, newer ideas, set no limits for their imaginations.

One of them, Miller P. Schuyler, was the first to set the pace in this new era to come. In his story published early in 1935, he dealt with a theme of such cosmic

scope that heretofore it had gone untouched, unattempted; yet his originality and freshness of style gave it the air of utter simplicity. It seemed to have been given fully as much acclaim as had "The Core."

● Tremendously interested, Pencill continued to look through the 1935 and 1936 volumes. The established authors were still represented, but he was surprised to see an increasing number of the new-type stories by such of the coming authors as Miller P. Schuyler, Fran K. Elly, Hilliard Rowley, Benson Hubert, Donold W. Ollheim, J. Harvard Haggy, Festell Pragnus, John Harris Benyon, D. Cuthbert Chester, and others. He saw stories there, too, by authors who had heretofore only written letters to his magazine—Forrest Jackerman, Jack D. Arrow, and not a few others. B. Lue Pencill was pleased. In fact, he was delighted. From all appearances, "The Core" had indeed been as successful as Professor Mith had said it would be; the slowly dying interest in his magazine, and in science-fiction, had been rekindled.

Next he examined the magazines of 1939, 1940, and 1941, and was amazed at the change. With increasing pleasure, he viewed the very excellent quality of the magazines as a whole. They were of large size and printed on the very best stock of smooth paper. On the front cover were the words:

FUTURE FICTION

The Magazine Devoted Solely to Literary Science-Fiction. B. Lue Pencill, Ph.D., Sfn.D., Editor

On the title-page he read: "Circulation, 200,000," and his heart thrilled. The cover picture was enclosed in a square perhaps six by six inches, which left a neat margin around the edges and gave the magazine a dignified appearance. What it was supposed to illustrate, Pencill could not tell; he had never before seen a science-fiction illustration quite like it; it was utterly alien, yet possessed of a definite aristocratic beauty. The artist's name, Pencill saw, was Wayne Woodard. There were numerous inside illustrations, too, by this same Woodard. Pencill had never heard of any artist by that name, but he was certainly pleased at the evidence of his own eyes . . . .

For the first time, Pencill suddenly was aware that the room was growing dark. He looked at his watch, and was surprised to see that it was well past seven o'clock. Outside, darkness was coming fast. For a moment, Pencill was at a loss what to do with the magazines; no one must ever see them but himself. Then he remembered the big iron safe in the corner, the combination of which was known to himself alone. In a few minutes, he had it open and the magazines carefully deposited therein.

Pencill was very, very pleased with himself, with the way he had—would—bring the magazine out of the rut, out of its financial and literary difficulties, with the way he had—or would—develop the magazine to its present—or rather, future—high standing. "Future Fiction—The Magazine Devoted Solely to Literary Science-Fiction—B. Lue Pencill, Ph.D., Sfn.D., Editor."

He was about to leave when he noticed the automatic on the desk where he had placed it. Unlocking the safe again, he placed the weapon in the farthermost corner, and locked the heavy door upon it. Then, whistling with a cheerfulness he felt for the first time in many months, he left the office. He had decided to get gloriously drunk.

THE END

[*Read the postscript on the next page*]

Postscript to

THE RETURN OF TYME

By Mohammed Ulysses Socrates Fips

Head Office Boy, WONDER STORIES

● When this story was received, the Big Chief walked into my private cubbyhole snorting with wrath. The Big Boss evidently was distressed. He sometimes gets that way when one of the stories gets a bit too personal with his ego. So the High Potentate lets out a squawk thuswise:

"Lookahere, Fips, here is a damned good yarn, up to the last line, but that fool author goes haywire and ends a good story in quicksand by sending the editor out and having him get drunk.

"That," bellowed the Sultan, "is what you call a first-class hackneyed ending to a good story. Now then, Fips my boy, here is the story. It's up to you to look it over, and after you have thoroughly digested it, you are supposed to get a real O. Henry-like ending to the yarn so the readers will like it."

Saying this, the Grand Vizier lit a fresh cigar and stalked out of my office, leaving me with the manuscript.

I looked it over carefully, and immediately I was struck with the fact that I was at a great disadvantage with the editor, B. Lue Pencill. All the Editor-in-Chief of *Future Fiction* had to do was to look at the June, 1934, issue of *Future Fiction* and find the very ending he was looking for. Inasmuch as I did not have the future issues of WONDER STORIES at hand, I was handicapped, and I had to call upon my own resources. Anyhow, I hope I have succeeded in placating the wrath of the All Highest; so here goes, and I hope you like it:

Amended Ending

● He was about to leave when he noticed the automatic on the desk where he had placed it. Unlocking the safe again, he placed the weapon in the farthermost corner, and locked the heavy door upon it. Then, whistling with a cheerfulness he felt for the first time in many months, he grabbed a telephone and by long distance called up Professor Mith. He informed that worthy that he had great news for him, and that he should not fail to come to New York on the morrow. Pencill then left the office and went home for a much-needed sleep.

Promptly at noon on the next day, Professor John S. Mith, D.T., of the John Bopkins University, was again in Pencill's office.

"You will be surprised, Professor, but extraordinary things have happened since you left my office yesterday. You came within a fraction of a second of upsetting our universe, and maybe a few extra island universes thrown in for good measure. The fact remains that your stupendous story, 'The Core,' actually has been published—will be published—beginning with the September, 1934, issue. As a matter of fact, so sure am I of this that I will show you the story already printed in the September, October, and November, 1934, issues of *Future Fiction*.

So saying, he carefully went to the safe, which he unlocked, and took out the future issues which had, as yet, not been published, and dumped them on the desk before the astonished Professor Mith, who could hardly believe his eyes.

He then went into details and told the more and more astonished professor what had happened last night, and how Tyme had left the future copies of the magazines with him.

"But," continued Editor Pencill, "while it is a fact that your story, 'The Core,' is to be published in the future, as proven by these copies of *Future Fiction* now before you, there still remains the little matter of compensation for the story to you. At 3c a word, this amounts to $2,400. As you no doubt realize, this doesn't worry me one iota, because, evidently, it is all in the cards that I bought the story, and that I paid for it.

"But since it is *your* story, perhaps you will be good enough to tell me how I am to pay you for it—a mere detail, which no doubt you will easily iron out yourself. You, being the author of this super-science-fiction story, should have little trouble in telling me how the payment is to be made."

The professor did not reply at once. Instead, he looked through all the future issues from 1934 up into 1942, making notes all the while of the names of the stories, their authors, and other data.

● Pencill sat interestedly while he smoked a pipe. He did not seem to have a care in the world. Indeed, he looked much younger because the future not only seemed—NO—the future *was* rosy.

In a short time, the professor had finished and delivered himself of the following, in his best classroom manner:

"The solution, my dear Pencill, is exceedingly simple—nothing to it at all. I notice that all the wrtiers who have been the backbone of your *Future Fiction* magazine right along are well represented in the future issues, too. There are, all told, some four hundred odd stories by your

old writers in the coming issues of *Future Fiction*.

"We will leave out the new authors from whom you have, as yet, not heard, and whom, as yet, you do not know, because they have not made themselves known to you, so far. But here we have 400 stories to be published well into 1942, by your old authors. Each one of these stories, according to your usual rate of payment, figures at an average of just about $100. This makes a total of $40,000 which you will have to pay these authors between now and 1942. Now, every author knows how difficult it is to write new stories. It is time-consuming; he must think up his plot, and there is a lot of trouble to it, as I know myself, having worked a year and a half on my own story, 'The Core.'

"Suppose you were to tell all of your authors *that you already have all of their stories*, and that between now and 1942 it won't be necessary for them to write these particular stories, a list of which you will be glad to furnish each author. As a matter of fact, you can furnish each author with a copy of his story, which you already have here on the table. The author immediately will recognize his own story, and can spend his time writing different stories, which he can sell either to you or some other magazine.

"Suppose, now, that you offer each author $50 for his story instead of $100, upon publication. He should be glad to take it, because he does not have to work on the story except that, when the proper time comes in the future, he will typewrite it, but he will be much assisted by seeing his printed story before he ever writes it. But typewrite it he must, of course, otherwise this entire time business would be silly. He will even save the postage to send the story to you, because you can tell him in advance he need not send the story into your office at all. The postage is quite a bit of an item with most authors, as they will be glad to tell you.

"In other words, *you are offering the author $50 for a story which you already have, and which he won't have to write at all*, except that he has to *typewrite* it at the proper time in the future.

"That makes a net profit of $20,000 to you. You pay the authors $20,000 instead of $40,000 for the 400 stories.

"Now then, here is where I come in for supplying you with the idea of financing the deal. Instead of paying me $2,400 you pay me $5,000. Now hold on and don't go up in the air."

This remark was made because Pencill had jumped up in his chair and had become deathly pale.

"To continue," said the professor, "I appreciate the fact that I won't get my money at once. You make a profit of $20,000, from which we deduct $5,000 for my story, which still leaves you a net profit of $15,000. I will take my money in instalments, between now and 1942; you to pay me at the end of seven years $5,000, in other words, $714.28 every year. At the end of the seven years, you owe me nothing, and you have made a profit of $15,000 net.

"You can even do better; you can go to your bank and show them the future copies of *Future Fiction*, which Tyme has left with you. Tell them the whole story, and tell them about the deal where you will make $15,000 net profit. I miss my guess if the bank doesn't give you an advance of $7,500 on your personal note immediately. What do you say?"

Pencill was too much overcome to say a word. All he could do was to shake the hand of Professor Mith, and then he whispered in his ear.

BOTH had decided to get gloriously drunk!!

THE END

WHAT IS YOUR SCIENCE KNOWLEDGE?

Test Yourself by This Questionnaire

1. What is the theory of time-contraction? (See Page 264)
2. Where is the pituitary gland located? (See Page 271)
3. What is the function of the pituitary gland? (See Page 271)
4. Is space completely empty? (See Page 309)
5. Approximately how many atoms could you lay side-by-side for an inch? (See Page 309)
6. Do we use every part of our brain? (See Page 325)
7. What furnishes the bulk of our power sources? (See Page 331)
8. Has an atom ever been split? (See Page 368)
9. Is space hot or cold? (See Page 368)
10. Describe briefly the structure of the ear. (See Page 369)

THE SENSE TWISTER

By W. Varick Nevins, III

● There was a dull rumbling in the air and unsteady footing as the floor lurched heavily from side to side. A swarming mass of humanity pushed by in a frenzy of speed. Lewis Barden looked up from his magazine. He knew the subway well. He spent three hours a day in its nerve-wracking journeying. This was just another day. He would go to the office and work so hard that home for him was just a place to sleep. He did not even know most of the occupants of his boarding house. Here he was twenty-seven years old already and all that life held for him was a dingy little section of a large office with subway rides and sleep in between. He longed to live a life of excitement like the hero in the story he was reading. Science-fiction was his only escape from the dull routine. With it he tried to drown his own life in that of the hero of the story. A genuine interest in science had been developed by his favorite magazine after a not-too-studious college career.

Soon he was immersed in the final pages of the tale. As he reached the conclusion, he said to himself, "Golly, why can't something like that happen to me?" He looked across to the opposite seat full of people with gum-chewing jaws and vacant, staring faces.

"They seem to be satisfied with life, but I am glad that I am different," he philosophized. "There is not an atom of adventure or ambition in the whole car. Oh, for the days of the past or the future. The present is too monotonous."

He looked out of the window at the next station and discovered that there were yet six stops to go, so he picked up one of the many discarded newspapers to glance through. It was opened to the want ads, so he read these first. One in particular drew his attention because of its unusual tone:

WANTED: ADVENTURESOME YOUNG MAN TO PARTICIPATE IN A DANGEROUS SCIENTIFIC ENTERPRISE. NO PAY CAN BE OFFERED. MUCH RISK INVOLVED. ONLY THOSE INTERESTED PURELY IN THE VENTURE NEED APPLY. FOR FURTHER INFORMATION COME WEDNESDAY EVENING AT SEVEN-THIRTY TO 1436 WEST 10TH STREET. ASK FOR DR. AUSTIN.

"I'm your man," shouted Lew as he rushed from the car at his stop. This was Wednesday and he had already planned to answer the advertisement in person. Three of the gum-chewing jaws actually missed a stroke at the disturbance of the owners' semi-conscious state as Lew hurried away.

* * *

If his work had seemed long other days, it now seemed as though minutes had changed to light years if that were possible. Lew was not exactly sure what a light year was but thought it suited his situation. However, all days have come to an end so far and this one was no exception. Lew was the first one out of the office. Supper was hurriedly finished, then he entered the subway for his new destination. Finally, it was seven-thirty and Lew was ready to ascend the stoop of an ordinary five-story building. The first floor was a paint store, but above, it seemed to be a cheap grade of apartment building.

Many ideas sped through Lew's mind as he mounted the steps. What great adventure was in store for him? Perhaps he would have to give up his position. He had saved enough to last him about a year and he would do almost anything for a change. The office was getting unbearable. Visions of journeys in strange lands or possibly on other planets assailed

him as he rang the one doorbell in evidence. Almost before his hand was off the button, the door opened a crack and a feminine voice spoke to him in a whisper.

"Don't come in if you value your life. Heed this warning and go home in safety."

Needless to say, Lew was startled. This was the last thing he had expected. The warning promised more danger than he had bargained for. He quickly put his foot in the opening and forced the door open. A pretty, dark-haired girl of about twenty was standing there in the dim light. There was a sadness about her eyes that told of a not-too-easy life.

"Please," she begged, "don't come in. Go home while you may."

"No," replied Lew, "I came in answer to the advertisement to see Dr. Austin and I don't intend to leave until I have seen him. Is this the right place? Who are you?"

"I am Lillian Austin. Dr. Austin is my father. He put the advertisement in the paper."

"Then why are you so afraid something will happen to me? Are you afraid of your father? Tell me about it," coaxed Lew.

"*Shhhhh,*" whispered Lillian, "not so loud. My father might hear you. I don't know what has come over him recently. He seems to have been affected mentally. I am so worried."

"Yes?" asked Lew, becoming more interested.

"He has been working on a new invention that has used up almost all of our money. He thinks it is all finished but I am not so sure. Dad has been acting so strangely lately that I would hardly know him. Now, please take my word for it and go home."

"Not on your life," answered Lew quickly. "I am not going to leave anything that promises to be exciting. The advertisement promised thrills and I am going to get them. If your father is mentally deranged, you should not be left alone with him. Will you take me to him?"

"All right," was the dubious reply, "but don't say I didn't warn you."

"O.K. I hereby relieve you of all responsibility for the person of Lewis Barden," he grinned.

She took him up one flight of stairs and then led him toward the rear of the building.

"This is Dad's laboratory where he spends most of his time nowadays." She opened the door to a large well-lighted room. The only items it contained were two hard chairs and an apparatus of some sort over which an elderly man was working. He started suddenly and covered the equipment with a black cloth.

"You should have knocked, dear," he said. "Who is this gentleman?"

"This is Mr. Barden who has come in answer to your advertisement this morning. He wishes to talk to you about it."

"Ah, yes. Yes indeed," said Dr. Austin kindly. "Won't you be seated, Mr. Barden? I am sorry the furnishings are not more complete but my invention should remedy that as soon as the world knows about it. I shall call you when I need you, dear." This last to his daughter.

"Good evening, Mr. Barden. Don't forget what I told you," were Miss Austin's parting words as she left the room.

Lew turned to Dr. Austin. Surely this man could not be mentally affected. His whole manner was so charming and kindly. His grey hair added a touch of dignity to his bearing. However, Lew decided he would watch his step. Dr. Austin's next words astonished him more than ever.

"You must not mind my daughter. It has been one of the greatest worries of my life. She has what you might call hallucinations. Generally she is perfectly sane and normal but every once in a while she develops a great fear without logical reason. I am telling you this in case she has a chance to talk to you alone. I do not want you to misunderstand."

"That is a shame," said Lew. "You certainly would not think there was anything at all wrong with her. However, I'll try to understand if she acts queerly."

"So that explains it," thought Lew, "or does it? Which one is crazy or are they both a little off? This is certainly interesting. I am inclined to believe the doctor." These thoughts left him in a quandary, so he decided to continue the conversation.

"Do you mind if we get down to the point? I am interested in what your proposition concerns. Will you please tell me more about it?"

"Briefly, this is it," began Dr. Austin. "I think I have discovered a liquid which, when injected into the blood stream, will in a few minutes render all the body nerves very susceptible to ultra-violet rays and X-rays. The sensations then received by the nerves may be controlled by these rays. A beam of X-rays concentrated on a certain nerve will reverse the sensations received by this nerve. The ultra-violet beam will return it to normal. A combination of both rays will render the nerve senseless."

"I am afraid this is getting beyond me," ventured Lew.

"Perhaps I can make it clearer by means of an illustration," answered the doctor. "Suppose I were to give you an injection and then subject your thumb to the X-ray. In two or three minutes, the messages sent to your brain by the nerves would be the exact opposites of the facts of the case. Heat would give a sensation of cold and *vice versa*. Pressure on your thumb would feel like suction. Do you follow me?"

"Yes, I think I am beginning to understand now. The ultra-violet ray would change the nerves back to normal? Would you have to use a new injection for that?"

"Yes, the effect of the liquid on the nerves soon wears off but the sensations remain reversed until the same process is repeated with the ultra-violet ray thus bringing them back to normal. A combination of the two rays will deaden the nerve for as long as it is subjected to them."

● While Lew was listening to this discourse, he had an uncomfortable feeling of someone watching him. He turned around and looked in back of him but nothing suspicious was in evidence. He finally decided that his own nerves were not in very good shape. He tried to shake off his uneasiness by returning his attention to the doctor.

"What are the practical uses of such equipment?" queried Lew.

"Why there are hundreds of uses," returned the doctor. "Suppose someone were to injure his leg badly. The surgeon would deaden the nerves while operating, thereby proving its value as an anæsthetic. Afterward, while recovering, the sensations would be changed by the X-ray so that the pain would become pleasure. In that way, some of the most crippled people in the world would be made the happiest. Of course, the apparatus will have to be used wisely to prevent misuse; but that is true of almost anything on earth. Now that I have outlined one example, cannot you see the tremendous importance of such an invention?"

"I surely do," agreed Lew. "It would certainly be a blessing to the world; but what part am I supposed to play in it? Why did you advertise for me?"

Lew was still conscious of that feeling of prying eyes. Could it be that something else was happening in the house, something of which he had no knowledge? It was sinister. He again shook off his fears and listened to Dr. Austin.

"The whole trouble with my equipment is that I have not tested it on a human being as yet. I have tried it on animals but they cannot report their feelings to me. How can I tell whether the animal feels cold or hot when I hold ice against it? This major difficulty is to be overcome when I try it on a human being. However, that person for whom I advertised will have to be willing to take a certain risk. It may affect the mind irrep-

arably. This would not be noticed in the animals I experimented on unless it were very definite insanity. Lesser mental cases cannot be easily detected in animals. My daughter offered to be the subject but naturally any father dislikes the idea of using his own daughter as a subject for experimentation. Also her hallucinations would probably make her reports unreliable; therefore I advertised as I did. I have nothing to offer you. My last penny has gone into my equipment. You have a fifty-fifty chance of coming through all right. Are you willing? This is your last opportunity to refuse as I intend to begin tonight if possible."

This was just what Lew had been looking for, a new kind of experience, but now that it had presented itself, he was not so sure of himself. He thought over the matter carefully. Who was crazy, the daughter or the doctor or both? He rather trusted Dr. Austin; but then the daughter was in deadly earnest too. What if she were right? Did she know something about the rays that her father did not know? Hardly probable. And what about this constant sensation of prying eyes? Suddenly Lew decided. In spite of the price he might have to pay, he would go through with it. He answered the doctor's query.

"I am ready to take the chance, for science."

"Good," said the doctor, "I shall prepare for the experiment."

He went over and pulled the cover off the apparatus. Lew recognized it as X-ray and ultra-violet equipment of the very best type. Underneath was a sort of long couch. The doctor had his back toward Lew when a small sheet of paper was thrust quickly into his hand. He turned just in time to see the retreating form of Lillian Austin close the door. Lew glanced down and unfolded the paper. It was hastily written and difficult to read:

THIS IS YOUR VERY LAST CHANCE FOR LIFE. FOLLOW ME QUICKLY. I CAN SAVE YOU.

"Now that I am in it, I'll stay in," thought Lew. "Her- hallucinations are working overtime tonight."

The doctor was speaking as he worked. "This room is covered completely with a heavy layer of lead. Extra X-ray and ultra-violet rays would filter in and ruin the use of the injection especially during the day if I had not taken that precaution. And now, my dear Mr. Barden, if you will be so kind as to step this way?"

"Just like a movie usher," thought Lew. He stood up and walked over to the apparatus.

"Which part of my anatomy shall we use for the test? How about my tongue? It would be a change to taste sour sugar and sweet lemons. I wouldn't have to worry about biting my tongue, would I? It would be most enjoyable. I would have to be careful about whom I kissed, though. I might not be able to stand the agony."

"I am glad you are in such good spirits, my boy," nodded Dr. Austin. "Please recline on this couch. I think you will find it quite comfortable. One finger will be sufficient for a preliminary test, I think. Are you ready?"

"O.K.," answered Lew, weakly. He wasn't quite so sure that he was enjoying himself as much as he had expected.

● Dr. Austin took a hypodermic from a container and held it poised over Lew's arm. He brought it down slowly and carefully pushed the plunger all the way in. Lew waited tensely for the result.

"Rest a few minutes for it to take effect," prescribed the doctor kindly, "then I shall start the X-ray treatment. Be sure to notice the results carefully. It all depends on you. It is still not too late to change your mind if you wish."

"No, sir. I'll go through with it," said Lew determinedly.

The doctor started the X-ray machine and gradually brought it to bear on Lew's finger. One more moment and Lew would be experiencing something that no human

being had ever known; that is, if it worked. How would this test affect his later life? It was about time for him to notice a change.

"That is enough, doctor. You win the bet," came a voice from the hall followed by a tall, handsome, dark-complexioned young man.

Lew sat up in surprise at this intrusion.

"I knew I would win," answered the doctor.

"May I ask what this is all about?" asked Lew, now on his feet.

"I bet the doctor that no one would be fool enough to answer an advertisement in which it was definitely stated that there would be no recompense and plenty of risk. As you see, I lost," replied the stranger.

"Tom has worded it rather badly, but that is the truth," continued Dr. Austin. "We had an argument in which Tom said that no one would be willing to be the subject in a dangerous scientific experiment without a lot of pay. I think you are an exceedingly venturesome young man. I like you for it. The world needs more people like you."

Lew was a long time finding something to say. This was all quite a bombshell and it had succeeded in scattering his wits. Finally he was able to master himself enough to say, "Well, I'll be—"

He checked himself just in time as Lillian entered. Well, anyway, she was not crazy. Neither was Dr. Austin. He, Lew, was the only crazy one. To be made a joke of was no fun, especially after all he had gone through. He picked up his hat.

"How about the injection?" he asked.

"Salt water," was the answer.

"Well," said Lew, "you have won your bet. Now may I go? I must say I do not appreciate the joke."

"I won five hundred dollars," ventured the doctor, "and I would be willing to share it—"

"Don't bother," said Lew abruptly. He turned toward Lillian. She seemed to be sorry for him. She would be good company and he knew so few people in the city. Perhaps she would consider going out with him some time. It would do no harm to ask her.

"This is Tom Brooks, my fiancé," introduced Lillian. "He was watching from the next room. We are to be married tomorrow."

From the doorway, Lew said an abrupt, "Congratulations."

* * *

The rumble of the subway the next morning accompanied Lew back to work.

"Good old science-fiction," thought Lew as he took the magazine out of his pocket. "It is more realistic than life itself and far less disappointing."

He unwrapped a stick of chewing gum and slowly put it into his mouth. A new jaw had been added to the chewing gum brigade.

THE END

Completely Empty Space Unlikely, Scientist Finds

[A.P.] New evidence that there is no such thing as completely empty space in the universe, even in the cold, dark reaches between the stars, was announced today by the Carnegie Institution of Washington.

Latest studies of interstellar space, made at the Carnegie Institution's Mount Wilson, Calif., Observatory, show that even in the remotest regions of space a few scattered atoms of matter always exist.

A space ship, zooming over the forty million million miles that separate any two average stars, would never travel in a complete vacuum; it would have to push through a tenuous barrier of about one atom in every cubic inch. This would not slow down the space ship much, however, for it is estimated that 100,000,000 atoms could be laid side by side in one inch of space.

"Interstellar space is an excellent but not a perfect vacuum," said Dr. P. W. Merrill, of the Mount Wilson staff, reporting his findings.

(Illustration by Winter)

Those shapes went into a sudden frenzy of action. Here, there they swept in a fury of flight. Their lightnings snapped and crashed.

THE MEN FROM GAYLN

By E. MANTELL

● Out of the nightmare unrealities of the late war, a million men brought home the story of a weird visitation. The tale never received official notice; the world's newspapers of the time, in the flooding tide of vital news and still more vital casualties, never found time to mention a fantastic, fleeting occurrence; and the very men who saw it for the instant it was there, merely shook their heads for a bewildered moment, blinked their eyes dazedly, and were each secretly relieved to find that they had banished the mirage. Only afterward, on chance comparison of notes, was it discovered that the vision had been more than shaken fancy.

It was one of those red nights of hell. The world shook and throbbed and jumped under the hammering of a million guns. The enormous blackness danced in a million pin-pricks of flame, and a red haze swirled madly in the eery light of intermittent flares.

At one instant, the landscape weaved and bobbed. And in the next, the strange thing happened. Out in the center of the inferno, in the very middle of whistling, wailing, shrieking, thumping crossfire, it suddenly materialized—a huge oval of livid violet light. Wide and high it stood, blotting out earth and sky. For an eternity of an instant, it lived and shimmered blindingly. For that instant, its glowing wall of flame rippled unbrokenly under the chance bombardment of missiles. And then, in a slight slackening of the tumult, as suddenly and as definitely as it had come, it vanished.

There the matter stood, a forgotten or only casually mentioned event in the lives of the beholders, until the coming of the Time-Raiders out of dim posterity.

● All time-travel fans should enjoy this tale. Time-travel is said to be the most impossible theme in science-fiction, and while this may be so, such stories cannot be called scientifically incorrect, for time-travel is so far beyond modern scientific experiment that one man's guess is as good as another's. A theory is not impossible until it is proven so, and the proof must be practical, and not a counter-theory.

In this story we are introduced to men from the so distant future that many civilizations have flourished and died, many greater than ours, between our age and theirs. But the men from Gayln do not come in peace—all except one.

They came on the 14th day of December, 1945, as suddenly as they had appeared on that night thirty years before. This time they materialized by daylight on a snowy scape of Indiana in the Americas. And this time they lingered.

The nearby city of Seton poured forth its thousands for a view of the miracle, a huge glowing ball of fire, overshadowing in awestruck minds the towering piles of Chicago's new Farragut Building.

"By the living lights," burst out a late arrival, "that's what I saw in France! I knew it. If Joe were here, he'd believe me now."

Curious people drew near and the newcomer waxed voluble. The first clue passed out through the mob and to the world like wildfire.

The world-wide news services went into action. In seconds, word flashed around the globe that a strange new intelligent entity had arrived. Interest ran high. Hourly bulletins were issued. The roads, the railroads, the air-lanes were suddenly crowded, converging on that spot in Indiana, bringing new hordes of the curious. Very early, the State Militia

was called out to handle the swelling crowds.

Wild theories flew still more wildly.

Mars, Venus, Jupiter figured on everybody's tongue, with Mars predominating. Learned men, appealed to, advanced irrelevant propositions and equivocated wisely. No one could possibly have guessed at the truth.

And then, finally, one of the bulletins carried real news. The veil of fire was thinning. A gleaming metal showed vaguely through the aura. Men! There were undoubtedly men or beings of some kind in the interior of that oval!

A little later came the word, "Gold!" The monster ship was made of gold.

In the terrific suspense of the ensuing hours, the waiting world was at the edge of hysteria.

In the meanwhile, the governments of the world were not idle. The private cables were hot with orders, advice, and admonitions to emissaries. Old rivalries had a new melon of untold magnitude over which to wrangle. And at the proper time, the proper amount of restraint must be flung to the winds to assure one's country the proper degree of supremacy.

Official representatives of the nations waited on the President of the United States to offer their felicitations on the happy advent and to warn him helpfully —or was it hopefully?— to be prepared for untoward eventualities.

"Queer lot of green-eyed beggars," he admitted to his secretary with a grim smile.

The beloved "fighting president"—first ever to succeed himself three consecutive times in the White House—had already made provisions for those "untoward eventualities." Air fleets and land fleets had received their mobilization and route orders. The visitors would be saluted and welcomed royally — according to their mood.

● The first man to emerge from the gold ship was a profound disappointment to the vast multitude: a tall, thin ordinary looking man, with a thick crop of black hair. In color he was dark, almost red, but no darker than some of the million peering faces. Only his garb aroused a new hope in his beholders. Black, elastic, and skin-tight, it limned every curve of his stringy, muscular body.

He leapt to the ground, looked about calmly at the tight-packed, deathly quiet assemblage, and raised a hand in friendly greeting. Turning back, he called in through the circular door.

And then the massed hordes burst forth in a titanic sigh of gratification.

"*Ahhh!*" it rolled and reverberated.

For here was something.

Perhaps a dozen men — indubitably men!—leapt one by one from the craft. Tall, nearly seven feet they were, heavily and lithely muscled. White teeth gleamed out of dark, red faces as they smiled over the masses, and the great shaggy heads of brown or black hair bobbed up and down as they nodded around the circle. These could be men of Venus or Mars, everybody decided.

Airplanes wheeled overhead as, in the little cleared area, Earth's official representatives stepped forward in welcome. Amenities of a sort passed, relayed by the omnipresent broadcasters to the waiting ears of the world. The strangers twitched warily, uneasily, under the incessant blinking of the photographers' flashes, and their fingers ever and again unconsciously sought the knob-like projections at their waists.

A million people, in a suffocating mob that spread out over the plains as far as the eye could see, oblivious to biting cold and trampled snow, surged involuntarily, heavily, vainly, at thick wire strands, and let out a great terrifying roar of elation and triumph.

New times were coming to the earth.

New contact with outer space was established.

Undreamt-of possibilities were before mankind.

The millennium had arrived!

CHAPTER II

Men from the Future

● That first conclave — the strangest meeting in all history—ended on a discordant note. Affairs, fortunately for untold lives, never reached the point of open hostilities, but among the thousand revelations, one downright statement stunned and alarmed the world, left it groping and gasping in uncertainty.

The greetings were commonplace enough.

"Welcome to Earth," said Professor Harrell.

With an eery shock, the tense waiting millions all over the globe heard one of the little figures on their telescreens reply in English:

"Greetings."

"You speak English?" came from the Professor in surprise.

"Yes." The tall thin man of the strangers was the spokesman.

Formally, with the smooth polish of the diplomat, Professor Harrell ignored the abnormality, the entirely unprecedented nature of the meeting. He presented his companions, giving to each of them, his title, his status, his origin; an imposing array of the world's foremost statesmen, scientists, and soldiers.

"I am Mithrad," said the stranger in his turn. "These, my masters, do not speak your tongue. We are from Gayln of the Eastern Hemisphere. We have come back to you on a mission which concerns the future existence of Man."

"You have come back?" questioned Professor Harrell. Newspaper stories of the globe's previous appearance had prepared him for that. "You have been here before?"

"No," replied the other. "We have come back through the ages."

"Oh." The Profesor dropped the point. It promised to be an involved explanation, and he knew what impatient auditors were at his back. "Where is Gayln?"

"In the Eastern Hemisphere of the Planet."

"Which planet, if you please?"

"Earth," replied the other a little peeved.

The Professor was amazed.

Mithrad went on. In a stilted English, he related that his masters came out of a dim posterity, a thousand ages, and each age would consist of ten or twenty thousand of "your earth-years."

Their scientists, he continued, had long been masters of time transposition. In the later ages, it was in universal use, and all history was an open book. For the first time now, an age as remote as this was being visited; these travelers were in fact pioneers of a sort and the trip had been fraught with a degree of danger. But they had come out of sheer necessity.

This age which they now visited had never been singularly noted for outstanding achievement. It had risen, flourished for its little time, even less than the normal span, and then had completely vanished.

A few moments ago, when they had come to rest in the midst of a titan upheaval of men against men, they had thought they were viewing the death throes of a lost civilization. For themselves, they had seemed a fortuitous circumstance, and they had reversed the course of their journey to succor some of the survivors.

As his soft penetrating voice went on, much of what he said was obscure to his auditors. But ever and again there appeared a reference to a mission, a need, a message. Sometimes the speaker would halt to gather his thoughts, sometimes he stopped to choose a word, sometimes to listen respectfully to some interpolation from one of his companions, delivered in a liquid, slithering flow of unknown consonants.

Late afternoon shadows were thickening, and the exodus of cold and hungry people was gathering momentum when Mithrad came finally to the core of his message.

His companions, toward the end, had been growing impatient, fidgety, and more and more they prodded him in that jumbled, streaming flow of indescribable lan-

guage. More and more Mithrad hastened his words and a strained look settled on his face. The world's statesmen, despite their breathless interest, and the growing premonition that vague hints had been rousing in them, had been shifting in fatigue from foot to foot, and had been attempting from time to time to suggest a graceful adjournment—longingly—to the ship's interior, or, failing that, to one of the spacious consulates.

Then Mithrad came to the point.

"Our women," he said, "have chosen to retire to Chrszn,* a mountain country of the West. Imitating the ladies of the later Urjtrin* era, they have renounced all affiliation with men, and seek to establish an empire of their own. While certainly their course promises the end of maledom, it might also obviously mean the end of all mankind. It was this factor which defeated that earlier rebellion of the women of Urjtrin.

"But there is speech now of a new chemical vario-vibration which will forever banish the need of men on earth. Now they kill men at sight in Chrszn, and through psychological pre-determination, none, of course, are born.

"We have come for women. We come peaceably. We know you have not yet passed the infantile family stage of your race. As such, our offer will come to you as a revolutionary shock. But our time is limited. We cannot seek further through the ages for a collective bargaining era. We make our offer to you. For each maid, we will give to your governments, or to your peoples, her weight in any precious metal you will name. We beg you to consider this offer seriously."

● One of the strangers behind him interrupted him harshly. A caustic, threatening flow made Mithrad flinch, and he turned to continue doggedly.

"My master wishes me to warn you that we are prepared to defend ourselves against any attack; and that we are prepared to replace our peaceable requests by irresistible demands. We are determined, for the future of our own race and time, to have what we came for."

For a moment after that downright statement, Earth's representatives and the massed hordes over the plain were taken aback. The deathly silence grew intense as shocked wits and pent-up emotions collected themselves for a great outburst. The strangers seemed to sense the great upwelling of antagonism that had sprung into being. Their fingers flew to their black-clad waists, and unknown danger hovered in the dusk.

Mithrad stepped into the breach. Despite the cold, moisture dotted his brow as he addressed his companions. We of Earth knew not what risk he ran thus to interpose. But in the trembling of his limbs and in the glaze of his eye, he betrayed an awareness of his fate.

His voice, abased beyond recognition, addressed his masters. For only a moment, they let him speak. One of them cut in cruelly, definitely. Even as the others turned to clamber into the ship one by one, the dark figure extended its arm in the dusk and pointed a finger at Mithrad's head. Those nearby saw a flash of blue light leap from that extended finger. Mithrad suddenly, silently slumped to the ground in a motionless heap.

The stranger turned, grasped an extended hand, and leapt through the opening.

The round gold door swung slowly to and moved into place.

CHAPTER III

The Foray

● It is needless to review the storm of protest and the wave of unanimity that swept over the civilized world. Never before had there been this need for concerted action against a common foe, this joint cause that wiped out boundaries, nationalisms, and old differences. The nations, by popular acclaim, threw their resources open to the world's defense in a manner that warmed the hearts of the Universalists. The men mobilized eagerly,

*As close an approximation of the Gaylene word as may be contrived.

and sent mass telegrams to Geneva asserting specious claims to seniority.

And the women—inexplicably—were circumspect. Their militant organizations passed resolutions advising caution. They advised temporizing with the strangers. They voiced grave fears of the unknown powers of the Time-Raiders. And there was even some talk of organizing volunteers for the greatest adventure in the history of mankind: conquest of a new age by the Women of 1945. But that idea was nipped in the bud early—and by the best of authorities.

Mithrad lived. Ambulances, all too readily requisitioned that day, were on the spot. Great names in medicine, gathering toward quite another end, were available. And Mithrad, after all, was found to be the victim of ordinary electrolysis. Strychnine and oxygen were the means of resuscitating the man who turned out to be the Saver of the world.

The choice before the President of the United States was a difficult one. Not lightly was war to be undertaken against strangers, with unknown weapons, and Heaven alone knew what weird powers. That bomb and shell would have no effect against their flaming protective veil, he had the evidence of a million witnesses. And in the face of their very apparent new knowledge, it seemed foolhardy to pit the puny science of his world. If the only alternative meant surrender, then would the "fighting president" live up to his name. In the meantime, he gathered up his powers, assembled his "Brain Trust," and posted a close watch on the ship. And when word came to him that Mithrad would live, he postponed formulating a definite plan of attack.

Gradually, the ship of the raiders waxed hot and incandescent, giving rise to the short-lived hope that they were about to depart. But the huge ball of living flame stayed on and made day out of night for the distant ring of sentries and troops.

Two days later, the men from Gayln of the Eastern Hemisphere made a sortie and brought the fight to Earth—a short, hopeless, one-sided holocaust that struck despair to the heart of America. The globe of fire abated its intensity not a jot, and yet, through the flame, the distant sentinels saw the familiar forms emerge, somehow different in appearance. Through hastily focused field-glasses, they found that the figures were black from crown to toe. Some sort of black hood, drawn over their heads, completed what was obviously a protective dress. And a closer scrutiny revealed something else. Each man as he came, glowed with a violet aura of his own. It was uncanny to see those black shining forms, each closely flame-ringed, suddenly appear through the wall of fire, land lightly on the ground and step out over the plain, away from the blinding background.

And still they came. A dozen. Two dozen. Fifty. A hundred. Out over the plain they spread, to some preconcerted plan. And they began their advance.

The field radios took up the story of the advance. Back to Headquarters flashed the word that the war was on. Out of Headquarters to a hundred points went the orders that woke to life concentrated forces of Earth. The tanks lumbered into motion. The distant hum of aircraft beat up the sky. The gas squads and the fire squads turned grimly to their mortars and bombs and tanks.

For a few minutes of deathly quiet, while the myriad forces of America converged on the hundred solitary figures on the plain, it looked like a massacre of the innocents. No earthly agency could withstand the hell about to unloose.

● But the strangers were more than earthly. Literally they waded through a rain of shot and shell, smoke, and gas and liquid fire. Low flying bombers dropped torpedoes that shattered the ground under their feet. Heaving tanks opened an approaching fire that was a solid wall of flying metal. The machine guns laid down a staccato lawn-mower of steel-jackets.

And in a sickening horror, America saw the invaders continue their unscathed

advance. Bullets, missiles, fragments, all simply vanished into nothingness on contact with a thin veneer of violet over a flimsy shroud of black.

Then retaliation. The lightnings flashed! Here, there, through the murky pall, extended arms and fingers pointed. Jagged blue streaks darted. Tanks ran into electrical discharges that danced, sang, played over them — and blasted them. Men, crouching and feeding their guns, were suddenly caught up in a convulsive, devastating blue flash that scorched, twisted, and leapt. Fliers dropped wingless and flaming to explode in a crescendo that punctuated the din.

Two regiments, nineteen tank corps, forty air squadrons were wiped out that day.

In half an hour, America's first line of defense had disappeared.

Now other points in the flaming gold ship destroyed new scores of black beings. Distant observers saw the swelling, fluttering hordes grow into thousands—thousands that covered the ground and filled the air around the ship like bees clustering about the hive. Then in a long, thin liquid stream, haloed in celestial seeming, they branched away through the air, supported and propelled by some invisible means, toward the city of Seton.

A thousand tales are told of vain, valiant sacrifices that day in the last of all man's strongholds, his home. The streets under the invading flight were raked by the lightnings. Men, desperately, hopelessly resisting to the last, were casually stricken motionless. Through some whim, the bolts they loosed in the city were finely gauged to disable temporarily. Their victims rose later physically unharmed; else the list of casualties would have been beyond computing.

Out over the city like a blight spread the swarm. Locks, doors, walls vanished before their magic touch.

Women, young women, comely women, were scooped from the streets, from their offices, their homes—all in merciful unconsciousness.

And leaving behind them a ravished, silent, desolated city, they filled the heavens in flight toward their ship, carrying in their arms the burden of their first successful foray.

CHAPTER IV

Mithrad the Savior

● America turned to Mithrad as its last hope.

Troops and arms were rushing to Indiana from all corners of the country. Europe and Asia were embarking their men with a fine abandon of home defense, the sooner to put within reach that most available, most useless of resources: manpower. And the High Commands were scouring the wide world and its brains for —an idea!

All was in vain. How, suddenly, to fathom the scientific mysteries of the bottomless future?

And the world came to the bedside of Mithrad.

The man had survived. He would live.

From time to time he had opened his eyes wearily. He had looked about. He would thankfully accept a little fluid, and then drift off again to the sleep of the weak.

There was nothing to do but grit one's teeth, clench one's fist over wet palms, and wait and pray.

Scientists found his body interesting enough. Under the black garment, there had been none of the projections noticed on his companions. But there was much else. Early, listening stethoscopically to the heart-beat, even when the man must have been well-nigh dead, they had been overwhelmed by the strength and complex confusion of the sound. The clamor had been beyond anything they had known. Examination had disclosed the presence of two separate heart systems, each acting apparently independently. There had been definite lack of a pulse anywhere in the body; blood seemed to flow in a single unvalved stream directly from the hearts. In the man's head, teeth had lost their individual structure. Solid ivory, sharp, hard, enameled, grooved and ridged, extended

through the gums from the skull proper. This race knew no dentists. And the man had no toes. His feet ended in a round jointed club-effect that was strange and revolting to view. The skeletal foot, however, with the dropping of a minor joint, was similar to our own.

In the elated fervor of their discoveries, the scientists almost forgot the waiting, crying world. They were rudely recalled by the horrors of Seton.

The man's first words were in the tongue of the strangers. Addressed in English, comprehension dawned slowly. And then as reality struck at him, he would have sprung erect if he could.

Anxious questions were on his lips. Closely watched over by his physicians, he heard a rapid recital of recent events. And a new wonderful calm that communicated itself to those about him settled over him as he sank into deep thought.

The others could only gaze at him with a prayer in their hearts.

"My life in Gayln," he said at last in a tone of incredible relief, "is over. It was not much . . . . Death might have been better . . . if that were an escape. But they would have followed me there to torture me.

"Here is freedom. A new world. More than I could possibly have hoped for. I cannot understand how Skryk failed to kill me.

"If only my fellows were here with me."

"Who are you?" he was asked. "And your fellows?"

"We are a captive race from Etryd taken for our accomplishment in the sciences. For four centuries we have turned the noblest powers of nature to the use of the beasts of Gayln. Now, perhaps . . . ."

"How did they come to leave you here?"

"That was an error," said Mithrad grimly. "A little twist of the knob. They should have made doubly sure."

● New strength seemed to have come to him like the release of which he spoke. Fire was suddenly in his voice as he commenced making inquiries and requests. He commanded the presence of physicists, chemists, geologists — and the greatest were near.

To his hearers, relief came in a great wave of anticlimax that made them want to laugh and shout—and made them giggle when the great men of the world came trouping into that white hospital room like schoolboys appearing before the master.

Probingly, with a superior penetration and brain-power, he reached out to the farthest limits of the earth's physical knowledge and resources. Often he had to convey his point in the most roundabout descriptions. There were no words in the language, he apologized, for some of the things he must have. Much he had to pass by in the urgency of the moment. Often he had had to stop to discard a line of investigation to cast about for something else. But slowly, here a hint, there a discovery, a plan, a campaign, grew into the vaguest outline of being.

And as the buzz of orders went out from that room, when the President gave the Saver *carte blanche,* when the newspapers leapt at the story, somewhat sketchily elaborated, of a world rescued and of a thousand and one new scientific achievements immediately at the world's doorstep; and when the world was apprised that it had added to itself a new citizen—and such a citizen!—a huzzah went up in the streets and the marts and the palaces that for a moment drowned out the tortured curses of the city of Seton.

CHAPTER V

The Strangest Battle Ever Fought

● Men over the face of the globe worked day and night at unaccustomed tasks. They delved into the earth for substances, hitherto unknown, but dishearteningly obvious. From rough sketches, hastily executed, they performed marvels of ingenuity. They made new alloys, and forged and worked them. They cast new machines, and spun and coiled wires in a manner that seemed to defy the laws of

physics. Feverish activity engulfed the world.

After Seton, women everywhere, lonely, homeless, or even merely adventurous, had come forward to offer themselves. Mithrad ended that. Women who went into the future, he said, would not live to arrive in Gayln. The rigors of the journey, consuming a space of two years, would wear them out. Only part of them would endure half of it.

Though the world had not particularly thought of it, they knew then there was no compromise or surrender.

Much more they learned in the days that followed.

Mithrad was a master of philology. He knew the thousand languages and dialects of a thousand ages. Through machines that cut across the dimensions of time and space, his age had accumulated the knowledge and history of all times. His own study had been that of the languages; that ability had prompted his choice as spokesman for the present expedition.

Much, much more he knew that he let fall in driblets from time to time. It was only out of an elementary knowledge in the matter, he said, that he was furnishing plans for the defense of earth. His friends, the truly great scientists, were aboard the ship now, slaves to the harsh men of Gayln.

But all this took time.

And the strangers came out of their ship again.

The population had been rippling out hundreds of miles in all directions from Seton, fleeing as fast as wheel and propeller could turn. But flight was vain.

They came three days later. Their flight mocked the speed of their prey. Desultory firing they silenced with the flick of a finger. Down they came and off they flew. And the horrified world could only stare in dismay, throttle lunacy, and plunge more grimly into its preparations.

Under cover of night, at various points on the horizon about that solar apparition, fantastic piles of machinery crept into being. Here the artistry of our own race came into its own, and a beautiful camouflage hid, before the dawn, the progress of each night's work. Herculean effort went into the structures, and working in guarded shadow, life and limb were mere items to be shed recklessly and cheerfully in the common good.

The dawn then came, after inconceivable labors, after difficulties almost insurmountable, when the world was ready.

The final military campaign was a weird, hazardous conglomeration of the battle tactics of two remote ages. The lowly trench mortar rubbed elbows with massive intricate dynamos new to the face of the world. And as the zero hour approached, men donned homely gas masks and misshapen sacks of black.

Three days before Christmas, just eight days after the arrival of the red men out of far-off Gayln, the two ages locked in a battle outside the realms of experience.

That day, the doors of the ship again released their sinister black swarms for the last time. The men crouching in their hidden crannies waited long for the word to test their vengeance, and long the world was delayed. Still the black fluttering figures came streaming from the craft.

● The first unit of the defense went into action.

Invisible, from miles away, ton on ton of insidious tear-gas went streaming over the landscape. Gently, before noiseless motors, it was wafted toward that common center. The air became saturated with it to a thousand feet. And still the invaders were unaware of it.

Then the word came. Men leapt to switches. Dynamos worked to humming life. The ground started quivering. Invisible electrical forces went out in beams toward the scintillating globe of fire and its hovering cordon of gleaming shapes.

Those shapes went into a sudden frenzy of action. Here, there, they swept in a fury of flight. Their lightnings snapped and crashed. Trees and earth writhed and

blazed. And many a man, despite his insulations, his lightning arresters, and his triple groundings, shriveled to instantaneous death.

Out in the center of the field, the laden atmosphere grew heavy with high potential, as invisible combating energies strained at each other. The rising roar of the dynamos in a step-up tide of vibration seemed to quiver the universe. The livid ball gleamed golden and intensified.

Men could only wait sturdily for death while forces they did not see, could not understand, battled for them in another dimension.

Slowly, with the entire power of the earth pitted against the limited resources of that separate alien entity, the strength of earth climbed. The ball of fire glowed not quite so brightly, the flame grew duller; it wavered. The little black figures in an access of activity crowded and jostled at the entries. Gone was all thought of offense. They were trying now to get away.

Suddenly, with a last dying upflare of light, the glittering sheath, the protective veil vanished. With its going went the wisps of violet light from the fliers. Then the tear gas took them. Like plummets, they dropped from their heights to sprawl in agony. From the interior, a few emerged to drop instantly. But the gas was already seeping through the openings, sinking in and down, striking into all corners. The ship was silent.

The men of Earth, a hundred thousand of them, were already in motion. Exaltation lifted them almost beyond bearing as they sped over the plain, as they scaled the golden sides and penetrated dangerous interiors. Many a man, forgetful of gas, shouted in holy glee, and took a lungful of paralyzer.

Two hours later, the rescued, hysterical femininity of a race was on its way homeward under proud, protective, tender care.

And the proud, red supermen of Gayln, stripped of their belts of power, weak and ordinary as the mortal men they were, were herded to the wire enclosures prepared for them.

● From that day, we may say, dates the golden age of our world. We of today find all this too new to grasp, too stupendous to appreciate. To Mithrad, and to the fellow-scientists that he saved from the ship, the world owes its dimensional transversers, its time and space transposers, ionic transmutation, and degravitation and flying machines that utilize the polar magnetic waves.

To them we owe the discovery of and intercourse with the myriad parallel worlds which to us smack of the supernatural, and which are our refuge and solace when particularly dear ones move on to them.

To these scientists, we owe the abolition of disease and disfiguration; we owe the transplantation of the vital organs, and the lengthening of the human life span.

And all is not yet. Every day brings its new contribution from them to spur Man on his road toward the heights.

Our women, comically, speak of segregating themselves for the establishment of a superior, home-loving, peaceful race, but that is a matter for the tenth generation.

Certainly, the people of Galyn have more than made up to us for the loss and anguish they caused in the recent invasion of the Time-Raiders from the Eastern Hemisphere.

THE END

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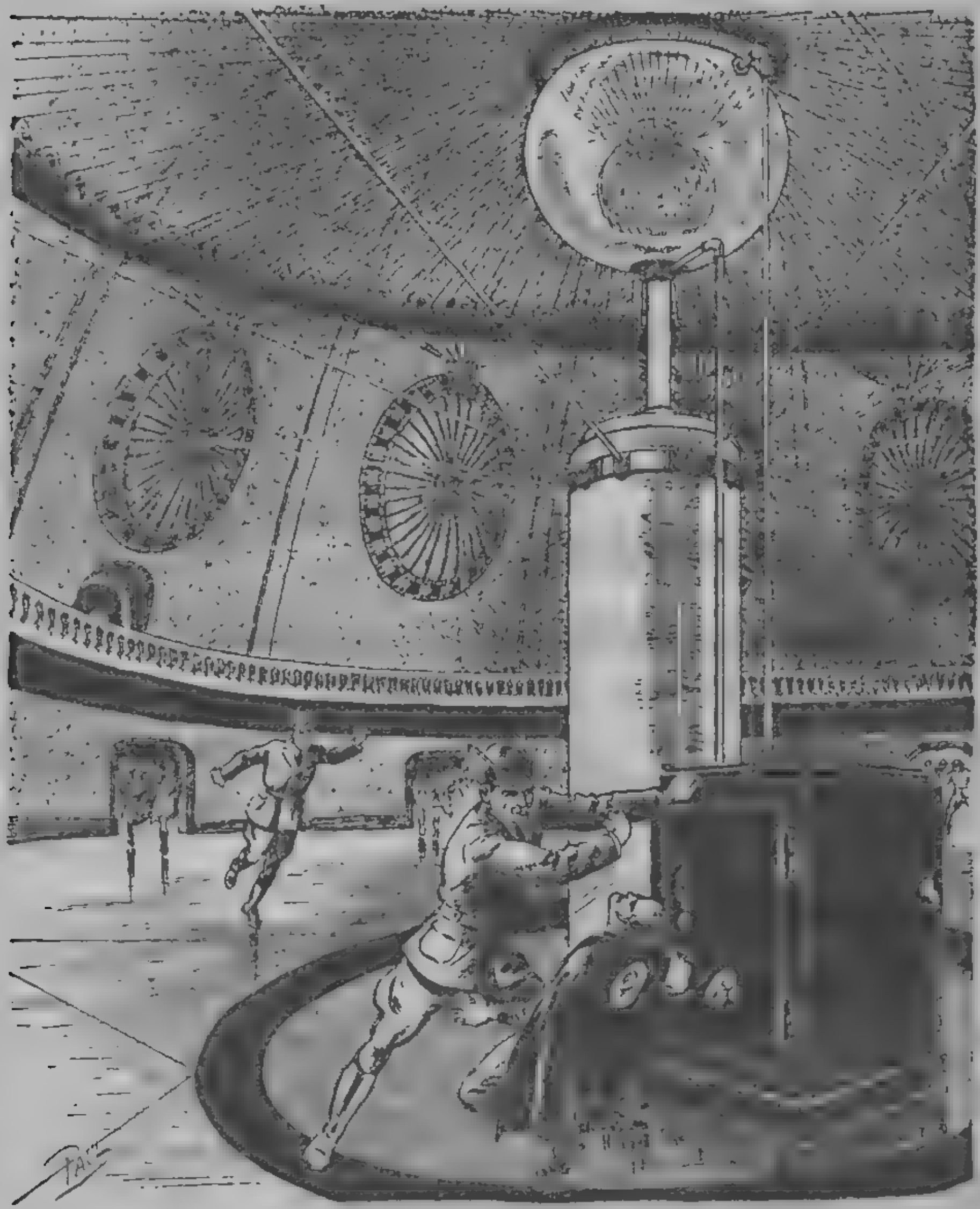

(Illustration by Paul)

Williams streaked toward the black box, powerful hands outstretched as though to grapple with some Zulu enemy.

ENSLAVED BRAINS

By EANDO BINDER

PART TWO

WHAT HAS GONE BEFORE:

● Hackworth, an explorer in Africa in 1973, discovers his missing cousin, Williams, who had been lost in the jungle for the past forty years and become a leader of a band of natives. Williams is brought back to civilization and is astounded at the tremendous changes that have taken place. There had been a terrific war shortly after he left America, much greater than the World War, after which a group of scientists seized the governments of America and Europe and set up Unitaria, a scientific organization which brought mankind to greater heights than he had ever before attained.

Hackworth learns that his daughter, who is in love with a young chemist named Terry Spath, is forced by the Unitaria to marry a scientist whom she had never seen before. She had rated so high in the government test that it was thought that her union with one of equal mentality would produce highly intelligent children. Hackworth, Williams, and Terry are horrified at this, never expecting that she would pass the test. Then Williams shows them a solution from an African plant that he had brought back with him. It was a drug that would put any living thing into suspended animation for an indefinite length of time. They would only awaken when commanded to do so by a designated person. This drug is administered to Lila, Hackworth's daughter, in order to stall off the marriage until something further could be done. The scientists of Unitaria are puzzled at Lila's peculiar affliction and put her in a hospital. She was told by hypnotic influence, while going under the drug, to awaken only when Terry commanded her to.

The three men tax their mental resources to think up some way of getting Lila away from Unitaria and the Eugenics Law, which would force her into an unhappy marriage. As Part One closes, Williams is being shown around Unitaria and they are approaching the Unidum Capitol in New York City. *Now go on with the story.*

● **Now that we have had an introduction into Unitaria, the super-civilization of 1973, we are ready for the astounding adventures that are to follow in rapid succession.**

Williams has seen the virtues of Unitaria—and some of its unjust rulings, such as the Eugenics Law which was about to force Lila, the daughter of Williams' cousin, Hackworth, to enter upon an unhappy marriage.

But the greatest revelation in his life is still to come. He is about to learn something so terrible in its scope, so inhuman that it will change his entire life.

Rarely has such a living picture of the future been written. Rarely has such logic and truth been put into a tale of science-fiction. You will remember this story for years to come as one of the most colorful portrayals of things as they are to be that you have ever read.

CHAPTER V

An Enslaved Brain

● Williams gasped in sheer astonishment.

Just on the eastern side of Brooklyn was a large group of magnificent domed buildings of marble and copper, shining in the sun with blinding intensity. They covered roughly five square miles of ground and centered around a majestic structure that looked like a castle of old retouched with the inspired finger of a futuristic artist. It was a hive of activity, aircraft rising and descending, autos creeping like ants, and tiny dots entering and leaving the various buildings.

"This then is the place where the destiny of half a billion souls is centered," commented Williams with awe. He suddenly realized forcefully just what a gargantuan state Unitaria was—the old United States, Canada, Mexico, then over to the Old World; Britain, Ger-

many, huge Russia . . . . it seemed impossible in scope.

Hackworth began to manoeuver downward when they had passed the Unidum Capitol. He sped the plane forward finally two thousand feet above ground.

Long Island City clustered on the coast half way between the two tips of its namesake island. It had been founded in 1945 along with the simultaneous founding of the Capitol. Being purely a residence city for the tens of thousands of Unidum employees, it had been arranged with an eye for beauty. From the air it gave the impression of a sleepy midwestern town that had grown to a city without changing its rural aspect. Thousands of picturesque, sometimes quaint, bungalows and low apartment hotels dotted the uniform carpet of lush green grass, and endless rows of elms and poplars lent it a quiet, woodland air.

Hackworth landed at one of the many small airports and left the plane in charge of the hangar attendants. A half-mile walk down shady avenues brought them before a dwelling of stucco and peaked gables.

Williams was introduced to the man who answered the doorbell — Andrew Grant, secretary to Executive Ashley of the Unidum. He was a short, slight man of fifty, bald and spectacled. His sonorous voice seemed out of keeping with his physical being.

He greeted the visitors warmly and conducted them to the lounge. Hackworth did not delay long in coming to the point.

"Andrew," he said, "I've never dropped in on you before except to pay a social call, but this time it's for a purpose."

Grant lifted bushy eyebrows in instant attention.

"It's about Lila," continued Hackworth. "You know, of course, that she has taken the Eugenics Test and found to be of the type needed to be the mother of a Scientist's children."

"Oh, I was sorry about that when I heard the news," said Grant quickly. "Lila is a wonderful girl. And young Terry—I suppose he's broken-hearted?"

"Naturally. None of us felt any too pleased about the whole thing. In fact—" He paused, then: "Andrew, you will hold anything I say in utmost confidence?"

"Surely. You know me well enough for that."

"Well, Lila at present is in a condition preventing her marriage to a Scientist, which should have taken place three days ago. While this *impasse* holds, young Spath, Mr. Williams here, and myself are going to try to save Lila from the Eugenics Law. I have come to you in the hope that you may be able to help."

Grant had suddenly turned very grave. He hastily looked about the room as though fearing eavesdroppers; it was treason talk.

"Lord!" he breathed. "What do you mean?"

"Isn't there any possible way to annul or veto the Unidum decree in this matter?" asked Hackworth with a note of pleading in his voice.

There was a pause before Grant answered. His eyes avoided those of his friend.

"Well . . . . Earl, now. Really, it's unheard of! Annul it, veto it! Unidum decrees are not subject to repeal; you should know that."

Hackworth threw an "I told you so" glance of helplessness to Williams. He heaved a weary sigh and turned to Grant.

"I know that, Andrew. But you can't blame me for trying . . . . after all, it is a father's heart that prompts me. Suppose your daughter, Elaine, who will soon be eligible for marriage, loved a young man and—"

Grant's face suddenly paling checked Hackworth.

"I'm sorry," he ended apologetically.

Grant came to his feet and paced up and down for a minute, obviously wrought-up. Then he whirled.

"You're right, Earl," he said tensely. "Elaine will have to take the test herself soon; she has met a young man . . . .

"That Eugenics Law—a thousand curses on it! Deep in my heart I've al-

ways hated it. And I know you and I are not the only ones. It is one of the worst mistakes the Unidum has ever made. I'd like to help you, Earl, if only because of the thought of my own daughter and her happiness. You say Lila is in a condition preventing marriage. Is she ill?"

Thereupon Hackworth told the whole story of the drug and their plans. Grant showed his extreme surprise and looked at Williams with a new interest.

"Now that I know the whole story," said Grant, "I'm going to do my level best to help Lila. I've got connections in the Unidum that may—and again may not—result in her release. Don't mistake me. I'm not underestimating the task. As far as I know, no woman has ever been released from the Eugenics Law, but there is a first time to everything. Now give me, say a week's time in which to do some guarded investigation."

"If only Lila doesn't awaken in that time," muttered Hackworth.

"She won't, to all indications," interposed Williams quickly. "I feel almost certain, call it jungle instinct, that only Terry's voice can bring her back from drugged sleep."

"I'll call you by private radiophone," concluded Grant, "in a week's time or less."

Hackworth arose and gripped his hand in silent gratitude.

* * *

The day after their visit to Andrew Grant, Hackworth decided to show his cousin something of the internal workings of a modern city, since he had already seen New York from the outside.

"You know, Dan," he said before they started, "one of the reasons the standard of living is so high in 1973 is because machines have come to do a great deal of the world's work. Unitaria especially is a highly mechanized civilization. So much of the work is done by machines that what is left is easily accomplished by a maximum working week of thirty hours for Unitaria's citizens. And the total production is so great that there is more than enough for the comfort of all. I'll take you around today to various industries so you can see the machines."

Using electro-car transportation, they spent a whole day going around to New York's various industries. Williams lost himself in a dream of wonder. Factories were usually large, clean establishments crammed with a bewildering maze of machines, tended by humans who looked puny and futile beside them. Tireless metallic moving parts twinkled up and down and in and out. They seemed to wink at Williams as though saying: "Isn't this easy, though?". Finished products spewed forth in steady streams into automatic receivers that carried them away for packing and distribution.

How efficient and quiet it all was! No clanging and banging and ear-splitting discordance as had been the bane of 1933's ponderous machinery. The engineers had practically eliminated unnecessary noises. A smell of pleasantly perfumed oils and lubricants hovered near the machines. The comfort of the attendants had been thought of to the last degree.

Williams could not help noticing that most of the workers seemed cheerful, did not seem to mind their tasks at all. They were all uniformed and added to the pleasing aspect of the neat machine-rooms.

Hackworth reflected a certain pride as he explained what he knew—pride that 1973 had improved working conditions so greatly over 1933. Not once was there a suggestion of the old-time sweaty, grimy, ill-ventilated, gloomy, screeching machine-rooms of forty years before.

Their final stop was at the food products Branch E, where Terry worked. The Unidum had long ago taken over all food products, since it was such an important thing in the lives of humanity. Branch E produced only one thing: a vitaminized impalpable powder which went into every and all foods consumed in Unitaria.

● Terry, whose working day had just come to an end, joined them and took them through the plant. He brought them first before a series of seven apparatuses different from any Williams had seen all that day. They seemed to be a hybrid between an enlarged clock-work and a chemical laboratory. Pumps drove colored liquids through thick quartz tubes; misted gases swirled violently in transparent chambers; huge rollers ground and ground in flat pans containing heaps of lumped materials.

"These seven machines," explained Terry, "are the initial steps in the manufacture of the seven vitamins needed in a balanced diet. Into them the raw products are fed through those chutes, which are complicated organic compounds produced at the Unidum's chemical works. These machines grind it and perform certain reactions that start the building of the intricate vitamin molecules. But they only perform step one. Before the new compounds undergo further chemical reaction, they are tested by analysts."

They passed to the next room which also housed seven machines, but vastly different from the first seven. These were a conglomerate of millions of tubes, retorts, boiling liquids, and swirling solutions.

"Here the molecules are further rearranged toward the ultimate vitamin molecules. Rigid tests are performed before they pass on. Batches now and then turn out wrong and have to be thrown out or re-worked."

Each room in turn had new and strange apparatus. Hundreds of people tended them and took out samples for testing which were sent by a tube system to the laboratories. Yet, strangely enough, reflected Williams, *no one seemed to actually have anything to do with the machinery.* In the other industries there had always been men before control-boards which gave an accurate resumé of the machinery's operation. Here the machines went on endlessly as though having been once started, there could be no fluctuation in their production.

"These machines are marvellous," Williams finally remarked. "Are they built so perfectly that no interference with them is necessary?"

"They used to have control-boards," answered Terry, "just like other machinery. But five years ago this plant was outfitted with a controlling mechanism that replaced human attendance. Only when a part wears out or breaks down, must a human being put his hands in the running of the units."

"What sort of astounding control mechanism can that be?"

"Come, I'll show you."

But Hackworth's voice made them pause.

"Let's pass that up," he said with an oddly hurried voice. "It's . . . . er—look how late it is. We must get home for dinner."

"Pshaw!" cried Williams. "Dinner can wait. This sounds too interesting to miss."

He turned to Terry, about to say "let's go," but noticed that he seemed suddenly perturbed. A covert look passed between him and Hackworth, that Williams' keen eyes caught.

"Perhaps you'd rather . . . . rather go home to dinner," said Terry, biting his lips as though caught in some embarrassing-misdemeanor.

Williams looked from one to the other.

"Well, what is it?" he asked quietly. "You know better than to fool me, now."

Terry looked helplessly at Hackworth, flushing.

"I'm sorry—I should have thought—"

Hackworth motioned to a corner of the room where they would be out of ear-shot of the workers.

"Never mind, Terry," he said. "We could not have withheld it indefinitely, anyway." He turned slowly to Williams. "Dan, the controlling mechanism for all these machines is . . . . *a brain—a human brain!*"

Williams almost staggered.

"Sarto je Bru!" he gasped. "A human brain! A *living* brain?"

"No!" cried Hackworth. He spoke rapidly now. "Not a *living* brain in the true sense of the word, but—"

He broke off and began again. "A brain taken from a dead body and rejuvenated somehow so that it can still perform mental tasks. Technically, I don't suppose anybody can explain how it's done, except perhaps the Scientists—"

"The Scientists again!" burst in Williams. "It sounds just as inhuman as the Eugenics Law."

He breathed a moment deeply as though controlling violent emotions. The others stood as though stricken.

"Let's go," said Williams quietly after a moment, "and *see* it."

Terry led the way up steps to the floor above. Its long hallway had numerous alternate rooms which contained stores of chemicals. At the exact center of the entire Branch E building it led to a circular chamber from which came the sound of clicking relays.

They stepped into an open doorway and onto a platform only a few yards square surrounded by a railing. A neon sign above read: "Visitors must not smoke."

The sight that met Williams' eyes as he stepped on the platform brought an involuntary cry of amazement to his lips. The entire wall-surface with the exception of the part near the doorway was taken up by an unbroken control-board with thousands of relays—tiny contact magnets—and pilot lights. There was a constant ticking noise and twinkling of the tiny globes. Across the ceiling from the boards stretched innumerable insulated wires, a tremendous network of them, to the affair in the center of the room.

This latter object riveted Williams' gaze after he had taken in the control-board. It consisted of a cylindrical solid base of metal surmounted by an intricate system of what seemed to be mirrors and tubes. But topping that was another object that brought a quick contraction to Williams' brow.

It was a circular glass globe suspended from the ceiling by a thick rod of metal. From it led a trail of thousands of fine silver wires, which connected to the mirrored mechanism below. From opposite points of the globe led two thin tubes which ran parallel after meeting at the back down to a black metal box on the floor of the room.

"That must be the brain!" murmured Williams. Staring at it he could faintly make out the irregular outline of a greyish object suspended in a viscid liquid inside the globe.

Terry began softly explaining, knowing that Williams would ask about it.

"The brain is suspended in a nutritive fluid which is pumped up and down those two tubes from the black box that contains what might be called a mechanical heart. The mirrors and photoëlectric tubes are the "eyes" of the brain, with which it examines the readings of the gauges next to the wall relays. By some intricate system of semi-nerve control, it operates the various relays and switches which keep the machines below running smoothly and regularly."

"How can one brain control so many machines, when it would take dozens of attendants otherwise?"

"Because every cell of the brain is used. In life we never use the full capacity of our brains; much of it lies dormant, subconscious."

"What if a part breaks down, either here or below? Surely the brain can't do anything about that?"

"No. The brain merely controls the power input and product output, and takes care of variations. For instance, if the raw product put into any one machine happens to be especially hard to grind into powder and takes longer to crush, the Brain-control automatically adjusts the timing to fit the new conditions. But whenever repairs are needed, the Brain-control merely flashes a signal along a special communication system. This signal goes to the central office of Branch E where the official in charge at the time sends a repairman to the required machine. Sometimes for days at a time the whole system of machines of Branch E

operates without the intervention of human hands, except, of course, the routine testing."

Dan Williams suddenly sickened of the sight and turned away. The mere thought of a human brain—once having occupied a living body like his own—perched up there like a frosty, evil eye, turned him cold. There is a sort of delicate feeling in all human beings that revolts against thought of any human organ being taken from the grave, from its rightful resting place, and brought to the harsh light of the upper world. "Ashes to ashes, and dust to dust—" And this thing!—hanging there, fed by a mechanical heart — he shuddered.

They left and went to the Hackworth home for a belated dinner, Terry with them, having been invited by Hackworth. All of them felt depressed and subdued. After the meal, they sat and smoked in the lounge, exchanging a few words on the subject of machinery. But Williams resolutely avoided referring to the Brain-control, and his companions were secretly relieved. Hackworth, knowing his cousin's 1933 prejudices, had expected him to show more feeling about the Brain-control. After all, it *was* a gruesome thing to be so suddenly revealed to a person from an age when even vivisection had been declaimed by pious people.

Suddenly Hackworth turned a deathly white.

Williams had just asked a question he had hoped would never be uttered by his lips: "By the way, where was my sister Helen buried?"

If Williams had not had a keen mind, he might have merely asked his cousin if he were ill, and advised him to go to bed. But in a flash, his thoughts seared to a horrible culmination.

Nothing was said for a minute but the question seemed to be still ringing in the room and Williams' eyes still asked the answer as they bored flint-like at Hackworth.

Hackworth would have given half his wealth to lie his way out of it, but he knew those steady blue eyes would detect the slightest sign of prevarication.

"Don't . . . . *don't* ask me that!" he almost screamed.

"I want to know," said Williams implacably. "The truth," he added.

CHAPTER VI

A Terrible Revelation

● Hackworth waved a hand that said: "Then I have no choice."

"Dan," he said aloud, "Helen's body was cremated by the Unidum, *after* her brain was removed and—"

"God!" cried Williams, his face working. "Helen's brain—" He trailed off into muttered Bantu dialect. Then there was a long silence. Hackworth looked at a rug design in abject misery. He had hoped that the subject would never come to light, but subconsciously he had known it was inevitable. Williams' only link with the past, with his father dead, had been his sister. He waited for his bronzed cousin to break out in violent anger, as he had at the cold-blooded Eugenics Law.

But when Williams spoke, his voice was quiet, ominously controlled.

"Begin at the beginning and tell me about the whole thing," he demanded. "And how my sister came to be involved."

At a sign from Hackworth, Terry spoke, for he was more familiar with the scientific aspects of the modern world than the older man.

"It was just five years ago," began the young chemist, "that a Scientist whose name is unknown succeeded in an experiment upon which he had labored, it is said, for many years. He announced that his work made it possible to take the brain from a dead person before decomposition had advanced, and bring back to it a semblance of life—not actual life, you understand, for then they could apply the method to the brain in the body, but a sort of semi-subconscious existence. His exhaustive tests had shown that this rejuvenated brain could still exert its full intellectual resources, if given a mechan-

ical contact with the living world. Immediately the Scientists saw a use for such a dead-alive brain: a substitute for a living brain or group of brains. Since the owner of the brain was officially dead, and since the Unidum had authority to conscript any bodies or parts of bodies under the Vivisection Law, it was decided to use such dead-alive brains for the benefit of the state."

"Why? For what purpose?" asked Williams. "Haven't you told me already that working hours are short? If the Brain-control supplants but say fifty workers, it means little in the total mass of people."

"Yes," nodded Terry. "But suppose *all* machines were given Brain-control! That would release millions upon millions of workers. The work could then be redivided and cut the working week to twelve or fifteen hours."

"And the people would die of boredom," said Williams deprecatingly. "Already, as Earl has told me; the people of Unitaria hardly know what to do with their leisure time. What possible advantage would *more* leisure time bring?"

"That I don't know," said Terry, shaking his head. "The Unidum has been rather secretive about their motives in this matter. Of course, that will not be a paramount question till many years in the future. At present there are only about 2000 Brain-controls in Unitaria, and as yet the only machines fitted with them are the vitamin units of the food products system."

"But Andrew Grant has told me confidentially," interposed Hackworth, "that plans are going through now to begin outfitting *all* food products machinery with Brain-controls."

"Which means," added Williams, "that the Unidum is determined to increase the use of them, without a logical reason for doing so."

"The logical reason," returned Hackworth half defiantly, "is to take more of the load of work from human hands."

"But to what advantage?" asked Williams again. "'Idle hands do mischief make,'" he quoted.

"Dan, be reasonable," answered Hackworth. "The Unidum has ruled wisely and justly for thirty years, and has met all previous problems with an eye to the future. In this case they *must* have plans of some sort to balance the shifting amounts of work and leisure."

Williams sprang to his feet and strode up and down the room for a minute.

"Somehow," he said half to himself, "there seems to be something sinister behind it. Can it be that the Unidum is retrograding, as all systems of government in past history rose to a peak and then fell to decay?"

Hackworth and Terry shot a guarded glance to one another. Dan Williams was putting into words things that were only breathed in Unitaria. Hackworth, in upholding the Unidum, had used mere words, for the sake of taking his cousin's mind from the thought of his sister's. . . .

Williams was speaking again: "And what is the public attitude toward the Brain-controls?—that is, if the public dares to have an attitude in this day of scientific dictatorship," he finished somewhat bitterly.

"Public opinion is divided," answered Hackworth. "For the most part, especially among the workers who tend machines, it is considered a great advancement. They envision the day when everyone will be his own master for the greater part of his life. But to tell the truth, there has also been much disapproval, mainly by those who believe it is sacrilegious to . . . . to disturb the dead, as you do."

"And as *you* do!" said Williams quickly, facing his cousin.

"Yes, as I do," admitted Hackworth, unable to meet the other's eyes.

"And now, Terry," said Williams, facing the younger man, "what more can you tell me about the brain itself that is used like a piece of super-sensitive machinery? To control machinery in place of humans it must *think*, and if it thinks it is not really *dead*, and if it is not actually dead

it must *feel!* Must have emotion or consciousness of some sort!"

Hackworth blanched and remonstrated inarticulately, but Terry answered a pair of compelling blue eyes.

"Yes, they *do* feel!" cried the young chemist. He faced the father of the girl he loved. "Mr. Hackworth, there is no use withholding these things. They can't be denied. I'll tell him all!"

Hackworth slumped back in his chair.

"The brains *do* feel!" continued Terry, with his eyes on Williams. "They have a residue of conscious life, enough to make it purgatory for them! *They* know what it's all about; *they* live in an endless Hell!"

He went on rapidly now in a flood of words.

"For three years now I've worked at Branch E. Always I've been tortured by the thought of that sentient brain upstairs, sending its impulses through cold silver wires, directing dozens of complicated machines. It must be a living nightmare! Hour after hour. Day after day. The brain cannot rebel! The Scientists have them under some hypnotic or drugged spell. But they can feel! They can remember their former life. They know pain, weariness, despair, futile anger—just as living persons. It has been proven. Two men, Scientists themselves, investigated and proved it. They were humane and not blinded by scientific zeal. But when they attempted to tell the world, the Unidum hounded them, drove them out, perhaps killed them—no one knows. Rumors spread like wildfire; their statements leaked out. But only a few, like myself, believe them. The rest are content to think of the Brain-controls as organic machinery, and to believe the Unidum which promises a future state in which each human will work only a small part of the time. But they forget the misery of the brains! Sometimes I think: what if *my* brain were taken from my dead body and . . . . Everyone is faced with that. There can be no more 'Rest in Peace' now!"

Hackworth had listened in great astonishment, not at the revelations, but at Terry's own emotional outburst. He had never realized that the young chemist had such violent antipathy toward the Brain-control innovation.

The effect of these words on Williams was fearful to behold. A livid fire shot from his eyes. His lips twisted into a hideous snarl. Zulus in Africa had seen that expression and turned ashen under their black skin. It was a compound of mighty rage and purple hatred. Terry quailed before him as he saw powerful shoulders knot into corded muscles under his shirt; he seemed about to spring to attack.

But suddenly Williams relaxed. His features smoothed to normal. He glanced apologetically at the other two men.

"Earl," he asked his cousin, "how did they come to use Helen's [illegible] brain?"

"It was just at the time that the first Brain-controls were made five years ago that Helen died. Since newly deceased persons only could furnish undecayed brains, all those who died on that certain day were conscripted by the Unidum. Their names were published as being 'honored' in being the first to initiate that great advancement in science, as it was called. The Unidum saw its mistake, for there were riots that same day—friends and relatives of the 'honored' deceased. But the Unidum did not see its greatest mistake in ever authorizing the use of Brain-controls. And to this day, it does not see it, or does not care to see it."

"Has there been no protest, no organized opposition?"

"Not as yet, although feeling has run high at times."

"*Sarto!* What sort of a world is this?" exclaimed Williams. "An inhuman, cold-blooded, repulsive scientific horror like that and nothing is done! And the Eugenics Law, again inhuman and anti-social, and there are no people of spirit to revolt."

"Revolt? The Unidum is all-powerful—practically a dictatorship. And the regulating pendulum is a group of Scientists to whom both the Eugenics Law and the

Brain-control movement are laudable advancements. What can the masses do? What can you expect them to do when the Unidum has given them a hundred benefits never known on earth before? Remember, Dan, as I've said before, the Unidum has done far more good than harm."

"I suppose I should look at it that way," answered Williams. "Yet mistakes can multiply. And the mere thought of Helen . . . .

"Tell me, where is the Brain-control which—"

"I don't know."

"You do!"

"Dan, I tell you . . . ."

Hackworth sweated a moment under the adamant blue eyes of his cousin and then whispered: "Boston."

"Then I'm going to Boston!"

"What do you mean?" cried Hackworth, scrambling to his feet.

"I simply mean that if it's the last act of my life, I'm going to see that my sister's . . . . brain dies its proper death!"

"You're mad!"

"Do you think I could live in peace, or *die* in peace, knowing Helen, all that is still conscious of her, lies in perpetual torment?"

"But there is nothing you can do! It's been tried before." Hackworth turned with a note of pleading to the young chemist, "You tell him, Terry. You tell him it's impossible."

"Yes, that's right, Mr. Williams," said Terry. "You could do nothing."

"I can wreck the whole control."

"Even if you break all the contacts and smash the mirror-eyes," returned Terry, "the brain does not die. As long as the nutritive fluid surrounds it, it lives. You can't harm that because the mechanical heart is enclosed in heavy steel. No key will open its lock except one that the Scientist has who renews the fluid periodically. The pipes leading upward are out of reach; so is the brain-case out of reach."

"What would a well-aimed bullet do if it struck the brain-case?"

"Why, smash it. But you need a gun for that."

"And you can't get a gun no matter how hard you try," interposed Hackworth. "You remember I left all my guns at Kabinda, Africa. No one can import a gun into Unitaria. And none are sold here either. The Unidum has completely disarmed the citizens of Unitaria."

● Williams drew his brows together thoughtfully at this. It began to look less simple than at first.

"Nevertheless, I'm going to Boston and look the thing over," he said firmly. "Somehow, sometime, I'll figure out a way."

"But Lila! Dan, you haven't forgotten—"

"No, Earl, I haven't. However, in the case of Lila, we can do nothing till we hear from Andrew Grant. In the meantime I will go to Boston and—"

"You will do nothing rash?" pleaded Hackworth. "The Unidum is quick to punish, and any trouble with them might eventually involve Lila through you."

But Williams was suddenly lost in reverie. Quite as suddenly a few minutes later he bade them good night and left the room.

Hackworth turned a grave face to young Spath.

"I'm afraid Dan has taken the news to heart. There was a close bond between himself and his sister. He is a man of sudden, though not always wise, decisions. Perhaps it would be wise for you, Terry, to accompany him to Boston tomorrow. He might try something rash that you could prevent."

"Certainly," agreed the young chemist. "I can get the day off from work."

"Good. You will sleep here tonight. As for that servant of his, M'bopo, I'm going to keep him here with me tomorrow. In his present mood, Dan is very liable to get violent. If M'bopo is along, one word in dialect will start him fighting, and between the two of them they would make plenty of trouble. Perhaps after

Dan sees the Brain-control in Boston and realizes his helplessness, he will gradually calm down over it."

They went to bed then.

Up in his room, Williams carefully unwrapped the layers of hide in the soft light of a shaded lamp and looked at the contents of his bundle. There were several things he had taken along with him from Africa: a tiger's tooth of odd shape reputed to be a potent charm, several other trinkets with a personal history behind them, and a soft giraffe skin pouch which he reflected would make a nice gift for Lila. He set them all down except the tiger's tooth. This he put into his pocket with a sheepish grin. Africa had left in him a faint vestige of native superstition.

He fingered the other articles for an hour, exchanging short comments with M'bopo on them, living in a dream of the visions they aroused of the past. Then he heaped them together on the dresser-top.

Undressing, he looked through the window and saw the small bustle of suburban New York. It had started raining, a warm September rain. It blurred the scenery. He saw a sweeping jungle . . . . a shadowed desert . . . . moving forms that might be gnus grazing in the brush . . . .

He started. No; it was a street of New York. It was 1973. This was not Africa; it was Unitaria. It was a new world with many strange things: hyp-marines, Sans-run aircraft, spanned cities, a new government, and a multitude of blessings to mankind. But then there was the inhuman Eugenics Law . . . . and the hideous Brain-control . . . .

Even in his sleep, he clenched his fists and creased his brow.

M'bopo had quietly undressed and stretched out on the rug beside the bed. His master had hardly noticed him in the past few days, but it was enough to satisfy his simple soul. During the times they were separated, the black man had either sat languidly in some corner of the house, dreaming of Africa, or had tuned the television set and watched the queer succession of pictures from all over the world. His master had asked him several times if he tired of this new life and wished to return to Africa. Each time the black man had denied nostalgia and insisted he must stay by the side of the *Orno Akku*. Each night he slept on the rug of his bed. One might wonder just how important his existence was in the events that followed.

CHAPTER VII

Disaster

● As the giant six-motored passenger plane hurtled high above New York on its way to Boston, William took a last look at the city below, rapidly rolling backward under them. Like a geometrician's paradise it spread back from the ocean, bizarrely unreal in the gloom of a cloudy day. He could faintly make out the Unidum Capitol far to the right. Then the city faded into the murkiness. Below was farmland, ribboned with broad highways along which tiny dots moved incessantly.

Williams was in a blank mood. The revelations of the evening before had seemed grotesque after a night's sleep. Brains in machines! How impossible! Brains, officially dead, with an after-life! Running machinery. Doing work. Thinking; sending out nervous impulses; *feeling! Sarto!* could such a thing be? Could a dead brain feel? Or was Terry wrong after all? Could the spirit or consciousness that had once been Helen Williams be actually captured in a glass globe and forced to do endless relay-manipulations? Could the brain of that sweet young girl of long ago be in a state where the poignant memories of happy life tortured it while some diabolical influence kept its nerve centers throbbing messages along silver wires?

Williams broke his spell and turned his face to Terry beside him, who had kept a respectful silence. He must clear his mind of the blankness of whirling conjecture.

"While we have the chance, Terry, suppose you tell me something more about 1973, of which I know only too little as

yet. Tell me about motive power today, what fuels and energies you use."

Terry willingly launched into the subject, glad that the older man's obvious brooding had finally evaporated. By placing his lips close to the other's ear, he was able to speak above the engine noise without strain.

"In 1933," he began, "coal and natural oil furnished the bulk of power in Europe and America. Today in 1973, half of Unitaria's power output is from a dream of your time come true—namely, tide-machines. All the sea-coast cities, and those a few hundred miles inland, are supplied with cheap electrical power. Up and down every important coast are several large tide-stations, as they are called, which convert the tide movements into hundreds of thousands of kilowatts of energy. From these it is wired via beryllium cables to the various cities. Much of this power is then transmitted for use through ether broadcast. For instance, in New York the electro-cars run around without overhead trolleys or third rails. They get their power from the ether. I won't begin to describe—in fact, I couldn't—the complex system of automatic units which attach beams of radio energy between the central power station and the many electro-cars. Many inland cities as far west as Pittsburgh are supplied with ether energy from the Long Island tide-station.

"The other half of Unitaria's power still comes from natural deposits of coal and oil. But oil is fast petering out and supplies but a small part. Today in 1973 coal is *never* burned as such. The gases and tars are extracted for the chemical industries, as in your time, and only the coke is used for power. Yet neither is the coke burned! By what is called 'hydrogenation' it is converted into oils and gasolines at will, which burn much more efficiently than the coke itself.

"This liquid fuel runs our railroad trains, our aircraft, our automobiles, and our ocean craft. Diesel engines have gone far in replacing light fuel engines. In fact, all railroad trains and ocean craft are equipped with Diesels that burn coke-oil. In the cities unable to use tide-power by being too far inland, internal combustion engines make electricity which is used directly, without ether broadcast. In central Europe, in what used to be Germany, rocket-turbines are used with fair success. Places that produce water power are still in operation, as Niagara, and a certain amount of wind power is also produced.

"With the advent of cheap oil from coal, the aircraft immediately began replacing surface transportation methods, and that replacing process is still going on. Perhaps in another forty years, everything will go through the air. The hyp-marines which carry half the ocean commerce are really aircraft more than anything else.

"And just as in 1933 they dreamed of tide-engines and rocket motive power and stratosphere flights (which are accomplished today), so do inventors today dream and labor toward sun-power engines, earth-heat motors, and even gravity-nullifying apparatus. Probably the *next* forty years will see those things come to pass."

Boston revealed itself dimly in fog wisps as a smaller edition of New York City. Spider spans and threads knitted its business section so heavily that Williams abstractedly wondered if all the buildings would arise if a Cyclops were to pick up one with a suitably large tweezers. Like an artificial whale, a hyp-marine was coming over the horizon, skimming the water.

Their ship began to descend and veer till it was in the right lane; then it bored to a position over the tall buildings and swooped gently. It landed like an angry dragon on the immense flat roof of the main air terminal.

"Do you know which Brain-control we want to see?" asked Williams as they walked away from the ship along the pedestrian path.

"There is only one in Boston," answered Terry, "as in all large cities except New York and London, which have

two each. As yet the use of Brain-controls is little better than experimental."

"An experiment that should never have taken place," muttered Williams to himself, thinking of his sister.

Escalators took them upward to one of the hanging platform stations of the public transportation system. Williams looked with new interest at the electro-car that slid to a noiseless stop. He found it hard to believe that it derived its power from an ether beam. Ten minutes of blurring speed and side-pressing curves brought them to Branch G of Boston food products. Both inside and out it was very similar to Branch E in New York. On the ground floor were the machines and analytical laboratories; on the second floor were store-rooms and the all-important Brain-control, and the less spacious top floor contained only offices.

Williams approached the Brain-control room with a thumping heart. His sister's . . . . how gruesome a thought!

A group of sightseers was just leaving the chamber when Terry and Williams came to it. A look of dull amazement was on every face; one could not see the Brain-control without feeling stunned by the wonder of it.

They entered. Williams swept his eyes around at the multitudinous magnet relays and lighted dials, at the bewildering maze of taut wires above, and then slowly, fearfully turned his face to the luminescent globe high in the center of the room suspended from a ceiling support.

"Je Bru il Bra!" A sweat broke out on his forehead and he flung his eyes desperately downward, unable to gaze at the globe that held his sister's brain and think rationally at the same time.

As he dropped his eyes, he noticed for the first time a man standing before the black box at the base of the cylindrical mirror support. Dark-haired and burly and dressed in conventional clothing with a light cape of blue cloth over his shoulders, he was busy at the black box.

"A Scientist!" whispered Terry, pointing. "Changing the nutritive supply."

● Williams looked with renewed interest.

It was the first of that group of 1973 "Scientists" that he had ever seen. On his cape, in the middle of his back, was a design of a robot and young girl, with a background of intricate machinery under the sun and blue sky, which was the rest of the cape. The man himself was in the prime of life and worked with sure fingers. His back was turned and he blocked their view of the inside of the box whose heavy steel door was open wide. But they saw him move a tall glass jar filled with a thick, colorless fluid from the box and replace it with an exactly similar jar which had stood beside him. Then his hands went inside the box as he proceeded to connect the new jar with the pumping system.

Leaning against the railing tensely, Williams' eyes moved along the black box, followed the two tubes upward, and fastened to the round globe. It was all like a dream. There was his sister's brain! That man—that Scientist—was fixing to the mechanical heart a jar of liquid food that would give semi-life to . . . . to Helen! So that she could continue to be a slave to the machines below! So that she could send continual nerve-impulses along cold silver wires. And perhaps all the while her consciousness, or soul, or whatever it was imprisoned in glass, was recalling a life of far-happier memories! Exquisite torture! "Helen, Helen!" he called in his heart. Perhaps by some super-sense she saw him standing there, knew him as her brother; even now she might be pleading, helplessly entreating him to release her from such horrific bondage. Yes! She *was;* he could feel it now—waves of sharp and subtle influence that shook his brain like an ultra-sound organ note shakes the ground.

Terry had kept an anxious eye on Williams, remembering Hackworth's admonitions. He had seen the strong play of emotion in his face, in his now fiery eyes, in the way he leaned against the rail, and had been perturbed. But what happened after Williams had trembled like a leaf, Terry was powerless to prevent.

With a hoarse shout, Williams vaulted over the rail. He landed six feet below, cat-like.

Terry shouted for him to stop but it was too late. Mouthing shrill Bantu maledictions, primitive, African in every move, Williams streaked toward the black box, powerful hands outstretched as though to grapple with some Zulu enemy.

The Scientist, hearing the s h o u t s, whirled and at the same time banged shut the black box's panel door. The sight of a brawny, snarling man lunging at him with berserk madness in his face, froze the Scientist with numbing fear. One ponderous swing of Williams' arm bowled him violently against the relays unconscious.

Terry by this time had recovered himself and also leaped to the floor level. He darted to his friend and attempted to bring him to reason. Williams brushed him away with a steel-spring arm and continued kicking and battering at the locked door of the black box. Only one thought burned through his brain — to smash the mechanical heart inside. But it was useless. Even his great muscles could not affect inch-thick metal.

Terry staggered erect from the floor. He looked at the crumpled Scientist with blood all over his face. Then he looked at the man panting and cursing, tearing at the heavy pump-tubes above the box.

"For God's sake! We've got to get out of here!" shouted Terry, but he knew Williams had not heard. Above, a red light was flashing intermittently. The alarm signal!

"The guards—they will be here any moment!"

Williams must have heard that and dimly realized its significance, for he suddenly ceased his futile battering at the black box and looked around desperately. His eye caught something lying on the floor. It was a small wrench used by the Scientist to fit the couplings on the necks of the jars.

With a savage cry of triumph, Williams picked it up, poised it delicately between thumb and forefinger, and hurled it straight up at the brain-globe thirty feet off the floor. Terry watched breathlessly. The tool arched upward, turning over and over like a thrown knife and . . . . glanced off the glass without breaking it!

In the midst of a shattering sound of fragile mirrors and photo-electric tubes, as the tool fell downward, there came the shouts of men crowding the platforms above. Figures clothed in uniforms of blue and red cloth and shiny leather leaped to the floor level and swarmed toward them, Unidum police.

Terry found himself fighting, side by side with Williams, with bare fists. Why he was fighting, he did not know, except that some breath of battle had flowed from the angry man at his side and made him forget all except the emotion of the moment. Williams proved to be a cyclone in disguise. Hard fists, powered by muscles that Hercules might have had, plunged piston-like at faces and chests. Sweating and grunting guards could lay no hand on him.

And Terry himself, in sudden exaltation, threw his full strength into the battle. It was a sensation new to him — pounding at faces. It was exhilarating. For a moment he forget everything except that he and Williams were beset by enemies who must be knocked off their feet. The savage pleasure of it dimmed his reason. Neither he nor Williams saw the man stealthily creeping to the back of them from the other side of the black box, with a pistol-like object in his hand.

It was over quite suddenly. The two besieged men staggered and then crumpled to the floor, paralyzed by an agonizing shock of livid lightning. But before he sank to unconsciousness, Terry took in with one glance the scene on the floor—a huddled group of guards with torn and blood-spattered uniforms . . . . and he smiled to himself.

* * *

"I'm sorry and in a way not sorry," said Williams through somewhat swollen lips. "I'm sorry that I got *you* into a mess, Terry. But I'm *not* sorry that I

tried my level best to . . . . to smash the globe."

Terry put a hand on his shoulder.

"I understand," he said. "Don't blame yourself; it was beyond your control. Just the same as I would have been driven to knock over Professor Jorgen — the Scientist who was to marry Lila—had I ever met him."

They were in the prison section of the Boston Science Court of the Unidum, waiting for trial which would be that very evening.

"Justice moves swiftly in 1973," said Williams.

"Yes, especially when the charge is treason against the Unidum!"

"Treason?" repeated Williams.

Terry nodded glumly. "The Brain-control is Unidum property. No matter how much we deny it, they will charge us with being connected with some sort of secret organization plotting against the Unidum. The jury, since this case will be tried by the Science Court, will be composed of Scientists. Their verdict will be unalterable and the sentence—" Terry shuddered—"more than we deserve."

"Would it help to tell the truth? — about . . . . Helen?"

Terry rubbed a bruised cheek thoughtfully.

"I'm sure it wouldn't," he said. "And it might involve Hackworth . . . . and Lila. Williams, it's a hard thing to ask—"

The young chemist stopped agitated; then: "We're in a bad predicament, Williams. The verdict is sure to be treason, regardless of what we say. For my part, I am willing to plead guilty to their initial charge, which will be treasonable action against the Unidum. This will cut short the trial and prevent the implication of Hackworth."

"In that case," said Williams, "I will do the same. Only I wish, Terry, that you had never come along with me."

Terry shrugged his shoulders. "It's not myself I'm worried about. But . . . . Lila!" He leaned back in the hard prison chair dejectedly.

Williams cursed himself inwardly. Why had he ever done such a thing so futile and thoughtless there in the Brain-control room? He had lost his head completely. Leaning against the railing, watching the Scientist change the jars, he had metamorphosed into a savage, unthinking jungle creature. It had been like a Jekyll-and-Hyde transformation. *Sarto!* Now he remembered — he had actually imagined that his sister's brain had entreated him to give her soul freedom from the glass globe! It had swept all sane thought from his mind. And now here they were, faced with stern sentence by inexorable law. All their plans were disrupted with Terry imprisoned and Lila out of reach.

It was a long and dreary afternoon. Both immersed in gloom and feeling the pain throbs of bruises and wrenched muscles, they spoke little.

The trial was short that evening. It took place in a huge court-room filled with curious crowds. The judge, emotionless and stern, peered at the defendants as though they were irresponsible children. Every man of the jury wore the blue cape with the symbolic insignia of Science. The very atmosphere of the place seemed cold, implacable, pitiless. Facing the jury of Scientists, Terry and Williams pleaded guilty to the initial charge of treasonable action against the Unidum. This took the court by surprise and prevented them putting in any further charges of conspiracy had they denied the misdemeanor and been cross-examined.

The technical presentation of the charge after the judge had deliberated the case, delivered in funereal tones, Williams hardly heard. The sentence—what would that be? He looked at the austere frown on the judge's brow and knew it could not be light. Terry sat trembling beside him, his face bloodless and drawn in suspense.

Then came the announcement of the sentence. Williams heard clearly a group of words that struck at his understanding like powerful blows:

"—just punishment will be painless *death* by gas, with the unmerited honor of

having their cerebral organs installed in Brain-controls in the—"

Williams heard no more. The voice ceased soon after and there was deathly silence. He vaguely comprehended that everyone was looking at him and that Terry beside him had turned to stone. What were those words again? Something about "death" and "Brain-controls." Death? To die! Could that be their *sentence?* Then the wall of resistance broke down and the meaning flooded in to his consciousness.

Everyone in the court-room, even the Scientists, shuddered at the sudden harsh, aimless laugh that came from the older of the two men's lips. Then he was led away. But at the door he jerked to a stop and faced the still, quiet court-room. His voice rang out for all to hear:

"Someday the Unidum will be sorry it ever permitted the inhuman Brain-control to become lawful!"

There was a murmur from the crowd and the Scientists looked at one another uneasily. The judge reddened in anger and seemed about to recall the case and inflict a worse sentence; but no worse sentence could be thought of. He waved for them to take the prisoners out. Terry had to be prodded several times before he realized it was over.

Escorted by a dozen Unidum guards, they were taken upward by elevator and brought before a different room than they had had previous to the trial. The door clanged shut behind them and after the grating of key in lock, there was silence. Williams had a queer look of defiance on his face. But his eyes were dazed; the dread sentence had struck hard. Suddenly his face turned fierce.

"*My* brain in a Brain-control! What diabolical irony! God! If I had only succeeded in releasing Helen, then it would be easier to take. But just think, Terry, for ages the memory of having failed in that will run through my dead-alive brain . . . ."

It was a ghastly thought and Terry shuddered.

"But they haven't executed us yet," Williams went on vehemently, "and may the Seven Devils of the Seven Hills of Ok-Ok eat my heart out if I lose hope of . . . . escape!"

Terry thought the man had gone mad, for he began to prowl about the dark cell as though looking for a secret doorway. He stopped at the real door with its heavy bars and shook them experimentally. Nothing could be solider. The cell itself was steel-lined. The one window had heavy steel bars like the door. Through it could be seen the fairy-like picture of Boston at night; but it was impossible to see the street level sixty stories down. Nearby the dark bulk of a huge enclosed span jutted from the building, extending across the street canyon. It carried electro-car service to the Unidum sub-headquarters.

Terry sat down with a feeling of pity for the old man. Apparently the strain had unsettled his mind. Perhaps he thought he was back in Africa, imprisoned in some rickety thatch hut that he could batter down if he wished. Certainly the look in his eyes was far from normal, and from his twitching lips came a muttered stream of clipped African gibberish. That there was no escape, Terry knew. There were hundreds of Unidum police outside the door throughout the building. The door's lock could not be picked for it had no key-hole on the inside. The walls were proof against human strength. And the one and only window let out upon a sheer drop of a thousand feet.

When the crouching man sneaked catfooted to the window and cocked one ear as though hearing something besides the drone of aircraft above, Terry thought it time to do something. Gently, but firmly, he tugged him away from the window, avoiding the perplexed look in his eyes, and pushed him to the wall bunk. Williams struggled hesitantly and then fell back flat. He slept.

Terry sighed heavily and threw himself on his bunk. The utter hopelessness and despair of their situation crushed him

mercilessly. They were in the steel claws of the Unidum whose justice was alloyed only with mercilessness.

CHAPTER VIII

M'bopo's Plan

● Hackworth spent the morning of the day Terry and Williams had gone to Boston writing a detailed report of the north route to interior Congo. With M'bopo to clear up certain tricky points in the geography of the land inhabited by Bantu tribes, he had made a comprehensive report which he planned sending to the Federated States of Africa. M'bopo displayed a degree of intelligence that surprised the white man; he traced unerringly the ramifications of the route along unexplored rivers and through unnamed deserts.

Hackworth had undertaken the voluntary task more to keep his mind occupied than because of keen interest. In the afternoon he visited the hospital in which Lila lay, asleep beyond the puzzled efforts of the doctors to awaken her.

When Terry and Williams failed to appear at the evening meal, he began to worry. Yet what could have happened? Alone, Williams might have done something rash, but not with Terry along. The double shock of hearing about the Brain-controls, and hearing that his sister's brain was in one of them, had shaken Williams deeply, Hackworth knew. That was why he had insisted on the young chemist accompanying him. Probably taking in a few of the sights around Boston, reflected Hackworth.

At seven o'clock he tuned in the radio-news of the day, uneasy and weighed down by apprehension. Then his worst suspicions were confirmed by the radio as the announcer told of the hectic fight in the Brain-control room: two men attack Scientist, attempt to smash control, resist Unidum guards, finally subdued and jailed, to be sentenced at the Science Court.

For a while all Hackworth could do was run up and down the room aimlessly. Then he fell to cursing his cousin, cursing Terry, and finally reviling the Unidum. When M'bopo stuck his head in the doorway, he poured out the story to him in a mixture of Bantu and English. M'bopo stood as though frozen.

"Let us go to *Orno 'Akku,*" said M'bopo when Hackworth had exhausted himself. "I will fight. *Sarto Bru!* I will kill all the guards and take my master from prison."

"No, no," said Hackworth. "This is not Africa, M'bopo. There are hundreds of guards. They would kill *you.*"

"I do not care," said the black man impassively. "Take me to *Orno Akku.* I will fight for him."

Hackworth suddenly realized that M'bopo was not asking but demanding. There had come a strange gleam in the Bantu's eyes. His primitive emotions were arising. Even the super-civilization of Unitaria could not daunt him.

"All right, M'bopo. But not tonight. They would not let us in. Tomorrow morning we will go."

M'bopo grunted and sat himself cross-legged on the floor.

The next morning Hackworth and the black man were waiting in the foyer of the Unidum sub-headquarters in Boston till visiting hours began. Finally at nine o'clock they were led upward to the sixtieth story.

The two prisoners were standing at the window dejectedly looking out upon the bustle of a large city. They turned in surprise when the door swung open.

"Hackworth!" cried Terry. "How did you find out about this so quickly?"

"Heard about it over the radio last night," answered Hackworth. He faced his cousin with deep reproach in his face. "Dan—"

"Yes, I know," interrupted Williams. "How could I be such a fool? I can hardly explain it myself. As I stood there looking at the globe and realized that Helen's . . . . brain was in it, something just snapped in me."

Hackworth nodded. "You're hardly to be blamed." He changed his tone to a

hesitant whisper. "How did the trial turn out?"

"Death! and our brains to be used in Brain-controls!"

"Great God in Heaven!" gasped Hackworth. "Not that!" He sank limply to a chair. He seemed to have fainted except that his eyes were open wide—and they reflected a great horror.

Terry did not have to tell Hackworth, and he had already told Williams, that the execution would take place in three days. All sentences for treasonable crimes in 1973 were consummated or started in three days. It was the policy of the Unidum to let no unnecessary delay hinder the progress of its iron justice.

"Lila! Lila! What will happen to her?" moaned Hackworth suddenly. "With Terry gone she will never wake up again!"

"Yes she will," returned Williams. "Eventually the drug will lose its effect; but it might be years. And she will awaken only to find her lover gone and a Scientist-husband awaiting her."

The three men looked haggardly at one another. Everything had now gone awry. Even Andrew Grant's help would do no good, for there would be no purpose in freeing Lila from the Eugenics Law with Terry dead.

"We must, simply *must*, try to do something," said Hackworth suddenly, springing to his feet and pacing up and down. "Jail-breaking is impossible—"

Terry and Williams smiled wanly at one another, thinking of the previous evening when the latter, in some mental lapse, had snooped around as though planning an escape. In the morning, awaking in full possession of his faculties, Williams had seen clearly how impossible it was to flee their prison in any way.

"—but there are other things," went on Hackworth. His voice sank to a whisper. "Perhaps I can bribe the man with the keys. If not that I might approach higher authority and let the sunlight flash on gold. I've got less than three days . . . . well, I'll do what I can."

But his tones were forlorn and unconfident, and Terry gave no sign of interest. They both knew the Unidum. They both knew how little hope there was for a man condemned by the Science Court. And from their very tones and actions, Williams knew too.

There was a strained silence. M'bopo, who had kept a respectful poise in the corner, suddenly confronted his master.

"*Orno Akku* wishes to go free?" he asked in Bantu. "Come, M'bopo will fight for you. We will kill the guards and fly away in a metal bird."

"No, M'bopo," said Williams, smiling despite the seriousness of the occasion. "There are too many guards and they have guns." Terry had described the building they were in before Hackworth arrived. It being the Unidum sub-headquarters, it literally swarmed with guards who patrolled all the corridors and floors. To follow M'bopo's plan, they would have to fight their way through each set of guards in turn before even reaching the street level or some outlet. Even then, a clever alarm system would immediately place armed police at all entrances and exits of the building.

"Then I will stay here with you," said the black man promptly.

It took Williams many minutes to convince M'bopo that his loyalty was misplaced under the circumstances, and he finished with a suggestion of tears in his eyes at the black man's unselfish devotion.

Then the guard at the door announced that their time was up. Hackworth and M'bopo were forced to leave. The former tried to say something cheerful as he left, but it was a dismal failure.

The public landing field and hangar at which Hackworth had left his Sansrun before entering the Unidum building was located on the flat top of a building but a block away. He had a choice of three lanes by which to leave and by mere chance took the one that passed the prison side of the Unidum building. As the plane took altitude, they passed several rows of windows heavily barred.

"Your master is in one of them," said

Hackworth, pointing in the general direction of the steel-barred windows.

M'bopo strained his eyes to them. Although it was two hundred yards away, he suddenly recognized Williams' face peering out of one of them. He excitedly pointed it out to Hackworth and the latter swung as close as the lane signals would allow to wave a last goodbye. Then he had to climb again, up and up till they were high above all buildings.

He felt a clutch on his arm. Words poured into his ear—Bantu words, startling words. Hackworth listened, enrapt. He asked a few questions. The replies brought a thoughtful gleam to his eyes. He guided his Sansrun along angled turns that circled the Unidum sub-headquarters. Again they fell to the lowest lane on the other side and climbed across the face of the barred windows. This time both of them strained their eyes in the direction of the window which framed Williams' tanned face. So absorbed was Hackworth in certain configurations that he had to shoot his ship upward with a jerk to avoid crashing into an enclosed span.

Then he sent the ship away from Boston. All the way back to New York, he and M'bopo talked excitedly. Could it be done? The black man claimed it could. Perhaps he was right! It was worth a trial.

* * *

Lying on his bunk in a darkness broken only by the dim light that came through the window, Williams found it hard to sleep. The soft, regular sound of Terry's breathing came to him except when the drone of an airplane passing near filled the little cell. Poor young Terry! All that day he had been despondent and moody. The few times he had talked he had talked only of Lila, about happy memories of the past. Clearly, he had resigned himself to fate. Williams asked himself, while tossing fitfully, whether there was any hope. No, hardly. Hackworth could do nothing, even with his entire wealth. Andrew Grant could do nothing. And there was no one else to depend on for help. They were inevitably doomed. First the painless death. Then a rude awakening of some mystic sort with the gradual realization of being a part of a complicated apparatus, forced to send nerve-impulses along thin silver wires . . . .

Williams perspired in a half-waking nightmare. He seemed to hear already the clicking of magnet relays. How relieved to feel the hard bunk beneath him; he was not in a Brain-control yet. But the clicking! It was still there! And a sibilant sound . . . . like rubbing!

He jerked his head erect. The sound came from the window. There was something there! With thought came action. He leaped from the bunk and toward the window. He stumbled over it—a rope! At its end was a small stone, clicking as some agency at the other end dragged it slowly over the floor.

Williams did not stop to ponder the inexplicable presence of a rope, but tied its end to a bar, giving it a final jerk to indicate its being done. In another moment, after several scraping sounds outside, M'bopo appeared, struggling violently. One of his hands gripped a bar; then the other. With a suppressed grunt, M'bopo contracted wiry arm muscles and pulled his body upward till his knees rested on the window ledge. He rested in that position panting.

"M'bopo! How did you get here? What is this all about?"

"*Orno Akku,*" gasped the black man. "I come to rescue you. The way I come, that way you go."

"How did you come?"

"I climb down long box that crosses ditch. I balance on rope. I walk to end of rope. Rope high as a man can reach. I jump. Here I am."

In a flash Williams understood M'bopo's enigmatical words of Bantu which could barely cover the subject. "Long box" was span, the nearby electro-car enclosed span. "Rope" was cable support. Williams became excited. Then he cursed.

"But these bars, M'bopo!"

The black man silently probed in his pockets and brought out a small bottle which he handed through the bars.

"You hurry, *Orno Akku*. Hackwort', he waits."

And Williams did hurry, but not with the nervous rapidity of a drowning man clutching at a straw. He had suddenly become cool, calm, efficient with a cold haste. A hand on Terry's shoulder, a few whispered words, a quick series of decision, and the young chemist became imbued with the same swift efficiency. Their lives depended on how quickly they worked.

Williams crouched near the door, placing his ear against it. He waved to Terry. The young chemist opened the bottle, poured out of it at the base of one of the window bars. There was a prolonged hiss. Then the bar was loose from its mooring, completely eaten through. Another drawn-out hiss and again a bar was loose. Five bars were thus treated. Terry found time to thank the gods that there was an acid like that which attacked steel as viciously and quickly as sodium metal attacks water. Williams, at the door, watched the process with wonder. He knew there had never been a compound like that in 1933. But the results interested him far more. When the final bar had been severed by the acid, he leaped noiselessly to the window. A word to M'bopo and he grasped the first bar and pulled outward. Terry held the black man by the belt and Williams helped bend the bar. With faint protest, the steel gave and curled upward. With a frantic strength, they bent the other four.

"Now," said Williams, panting, "comes the hardest part. That cable support that leads to the span is about ten feet below, says M'bopo. We must hang by our hands from the sill and climb down the rope to the cable. Then we must walk along it to the span. It's dangerous — one slip and . . . ."

Terry shuddered in understanding. It was a thousand feet straight down.

"Let's go," he said steadily.

Williams motioned for him to go first and Terry lost no time in clambering through the window. His first glance at the view from his precarious perch on the sill brought a chill to his heart. Far below, only partially revealed by lights, was the ground level. At various heights were both enclosed and platform spans, hung with red lights. All about were the cadaverous heights of slim towers. It was a dizzying spectacle. Terry recovered his shaken nerves, twisted carefully about, and lowered himself, glad to feel the firm rope in his hands. He descended hand over hand till his feet struck something solid, and a strong hand steadied him. M'bopo's round eyes peered into his.

In another moment, Williams came down the rope and all three of them stood crowded on the flat cable-lug that joined to the building. A cool autumn breeze whistled around the wall and quickly took the perspiration off their brows.

"All right," whispered Williams. "I listened at the door just before I left through the window; apparently none of the guards have heard a sound. But the longer we hesitate, the more chance we take. M'bopo, *umo ulka dis*. He'll go first, Terry. Then you. Do you think you can manage without help?"

Terry watched the black man without answering. The cable support for the nearby span stretched taut, enclosing a triangle with the building and the span housing. It was a hundred feet long and thick enough to give a solid footing. M'bopo, arms outstretched and slightly crouched to balance the gentle breeze, negotiated the cable without pause, as surefooted as a mountain goat. His body gradually faded into the gloom at the side of the span.

"I could hold your hand," suggested Williams, "or your belt—"

Suddenly realizing that he must seem craven in the older man's eyes, for not having answered his question, Terry looked into his eyes.

"I go . . . . alone, Williams. If I fail, there is no need for you to fall *with* me."

● Williams gripped his hand encouragingly and admiringly. It was one thing for M'bopo and himself, long trained in Africa in physical pursuits, to traverse the cable, but quite another for a man reared in civilization. The latter does not have that fine balance and muscular coördination that a child of nature has, nor does he have that callousness toward danger that brings great courage.

Nevertheless, Terry stepped away from the cable-lug with set jaw, determined to do or die. He took the first ten steps confidently and began to feel that his first fears were silly. But at the next step, a gust of wind pushed at him. Off-balance, he blindly put his free foot forward and only by sheerest luck touched the cable with his toe. Back of him a voice called encouragement. It was no time to hesitate and recover breath or nerve and Terry plunged recklessly forward, barely able to see the cable at his feet. He steeled himself not to look past the support, knowing that one glance at the pit under him would paralyze his every muscle. Breathing hard, swaying, and moving steadily forward, Terry forgot everything but the cable, his feet, and the wind. It seemed hours on end that he alternately lifted his feet and set them down. He dared not look up nor to the side. He wondered how far he was. God! Was this an eternal nightmare? Already he had tramped miles. His calve muscles ached as though he had run a marathon. He was getting dizzy. The constant stare of concentration at the cable was bringing spots to his eyes. He was swaying! The wind, in spiteful little gusts, would . . . .

Terry felt his front foot barely scrape the cable. It slipped and he knew it was over. Suddenly limp and hopeless, he felt himself toppling . . . . toppling into that deep pit between buildings. His body would drop like a stone, past five spans, down to the hard street; nothing would stop it . . . .

Now what had happened, wondered Terry. Something had grabbed his belt. Something strained at his body hanging over the pit with one foot only on the cable. And that something pulled him back from the abyss.

Terry's brain cleared. M'bopo was there with a hand in his belt, looking at him in mute inquiry. Terry waved forward, again on balance. One—two—three steps, and then Terry felt the welcome solidity of a broad, flat surface. They were on the span's roof! He had lost his balance and almost fallen only three steps from safety! M'bopo had saved his life. M'bopo was grinning now and large beads of sweat stood out on his brow. Only he would ever realize how much superhuman, agonizing strength it had taken to pull the falling white man upright, and at the constant risk of losing his own balance should the torque shift too suddenly from limp body to straining muscles.

There was a sound of running feet and then a familiar voice as a figure loomed up from farther along the span's roof.

"Terry, my boy! Thank God you made it!"

"Mr. Hackworth! Great to see you again. But how did you—"

"Explanations later. Must get away as quickly as possible."

They turned to watch the dim figure coming along the cable. Without hesitation, firmly and swiftly, Williams moved along the cable. There was an indefinable grace about him and a boyish elasticity that made it hard for Terry to realize that he was an old man in point of years. Certainly no younger man could do the feat any easier.

Williams came up with a rush, waving a jubilant arm.

"All here safe and sound," he hissed, nodding to Hackworth. "No delay now; into the ship, all of us."

As they ran toward the dark hulk of Hackworth's Sansrun, they heard the rumble of an electro-car beneath them. Terry smiled; little did the passengers realize that on the roof under which they streaked were four jail-breakers and an outlaw ship. How simple it had been after all, when but an hour before, escape had seemed absolutely impossible!

Williams closed the cabin door behind them. Hackworth was already at the controls. But before starting the motors, he had them all look around for a possible lurking police ship. It was against the law to land on a span. Detection would bring immediate pursuit. They looked searchingly around. High above from the towers of the tallest buildings came the broad sweeps of aircraft beacons, ribboning the sky. Several of the important traffic lanes were bathed in constant light, revealing a considerable night traffic. Where they were, beneath the lowest lane, it was a pocket of darkness between the lighted streets and the swingng searchlights.

Satisfied that no police ships were around, Hackworth brought the twin motors to life, idled them for a minute, and then shot the ship upward. They climbed obliquely toward the neon-lighted spire of a lane mark, up and up out of the canyon of spans. Suddenly there were lane signals and Hackworth obediently leveled. He breathed a sigh of relief.

"The police danger is over. Now we're just one ship out of thousands."

He spoke too confidently, however. Had he but known it, the pilot of a lumbering freighter, passing the Unidum sub-headquarters on the way to a landing a mile away, had seen the shadowed ship rise from the canyon. Suspicious as to the motives of a private ship coming from that forbidden direction, he reported the incident to the police after landing.

In the meantime, Hackworth piloted his ship away from Boston and headed in the gloom of night to the south. He built up a fast but safe speed, high above the commercial lanes. Then he turned to his cousin beside him.

"Dan, you're a free man, at least for a while."

"Thanks to you, Earl. You are—"

"Thanks to M'bopo," interrupted Hackworth. "It was his idea. Passing the prison side of the Unidum sub-headquarters, he saw that your window was within reach of the cable support from that sixth level span. At first I thought it hare-brained. Then I saw how easy it would be to land the Sansrun on the span roof in the night. As for the rest, M'bopo claimed it would be just as easy. And so it proved."

Williams struck his head deprecatingly. "And to think it escaped me entirely, that idea. M'bopo, unlettered native as we like to call him, has scored against the all-powerful Unidum. It's a curious thought. Well—" he changed his tone—"the important thing is now: where to go?"

"I've figured that out already," returned Hackworth. "You and Terry at present are outlaws. There will be a price on your heads. A peaceful life in Unitaria is impossible. The thing for you both to do is get away and live in regions not governed by the Unidum."

"Never!" came vehemently from Terry. "Not while Lila is alive. I live with her or die with her. I could never forge' her—"

"Let me finish, Terry," said Hackworth quietly. "My plan is to negotiate your escape from Unitaria, *along with Lila!* And furthermore, after I myself have carefully had my money transferred to foreign accounts, I will join you. We can all live a happy life in some sheltered corner of earth, free of the Unidum."

Hackworth's eyes shone as he went on. "The plan in detail is this—I am taking you to the Long Island Tide-station, whose superintendent is a close friend of mine. I have already spoken to him; he is to be trusted. A tide-station is the ideal place for you two to hide because of its position right on the ocean, and because the police will never think of you being there. Once safely hidden, you will simply lie low and I will do my part: charter a stratosphere ship and somehow get Lila from the hospital. Andrew Grant will help me do that. Then—"

An exclamation from Terry cut him off.

"Look! A ship is pursuing us!"

They peered backward through the rear-vision mirror. With ominous purposefulness, a long, slim tri-motored plane hung on their trail, rapidly gaining. It could not be mere chance that it followed

them; they were both out of the regular lanes.

"God!" cried Hackworth weakly. "It's a Unidum police ship; I can tell by its shape!"

CHAPTER IX

The Tide-Station

● The three white men looked aghast at one another. Hackworth became suddenly enervated; his eyes reflected hopelessness. Terry peered again into the mirror and confirmed the statement.

"That stops us," said Hackworth wearily. "It's possible they merely wonder why we fly so high and fast, but if they make us land and question us, the whole thing is spoiled."

But Williams was not so willing to admit defeat.

"How long yet before we reach the tide-station?"

"About twenty minutes at top speed. But there's no use trying to outfly them, Dan. They are much faster. Besides, they're armed; if we try to escape, they'll disable us. Not only that, in a few minutes there will be more police ships here—"

"And here's the Stop-and-Land signal!" burst in Terry.

From the pursuing ship had flashed a thin beam of crimson light, flooding the cabin with reflected red.

"If we disobey—"

"Stop-and-Land be damned!" cried Williams, grasping Hackworth by the arm with compelling fingers. "It's dark, isn't it? Turn off the cabin lights and drop. Maneuver around—throw 'em off the track! Why should we give up so tamely when we've gone to the trouble of breaking jail?"

Hackworth hesitated and Terry firmly motioned him away from the controls.

"Williams is right! *I'll* give them a run-around!"

Plunged in darkness, Terry manipulated the controls and shot the ship down. Leveling gradually, he swung in a huge arc that would take them away from the police ship. From the latter now shot several brilliant beams of white light which probed through the darkness, searching for the vanishing prey. For a moment it looked as though they would escape entirely.

Then Terry cursed. To one side appeared more beams of dancing light, a maze of them. Some of the rays almost touched them and only a quick drop or swerve prevented it.

"They've got the whole Boston Patrol after us," gasped Hackworth. "They must know we are the ones who broke jail. With the direct radio contact they have, they'll hem us in gradually—"

"Not if I can help it," muttered Terry grimly.

Williams encouraged him with hopeful words, and their ship became a plunging, weaving thing, trying to escape the inexorable beams of dozens of police ships. It looked like a dance of the fireflies. Every so often, the fleeing ship would flicker in the chance beam of a light and the police ships would converge like hungry vultures.

"If I only had more speed," groaned the perspiring Terry. "This way I can't draw away; I can only dodge up and down."

"No good, Terry," said Williams who had quietly watched the maneuvers. "They're gradually cutting us off on all sides. Can you give them a run as far as the tide-station without getting in range of their weapons?"

"Possible, if we rise at full power. You see, as a helicopter, we're their equal because they only have two adaptable engines. We *might* get as far as the tide-station with a good start. But a lot of good that will do."

"Try it!" said Williams in commanding tones.

Willing to try anything under the circumstances, Terry jammed his foot on the throttle and swung the air-screws upward. The beams of the police ships fell below for many long seconds, then again followed as flicker after flicker revealed the outlaw ship rising. But before they gained sufficient altitude to head the fleeing ship off, Terry had swung level at full

speed. He flew over a police ship from which came a sudden scarlet flash.

"Missed!" breathed Terry trembling. "And they won't get another chance for some time."

Ten minutes of ear-shattering flight, with the police gaining rapidly, brought them within sight of the tide-station at the tip of Long Island. Williams stared in interest as it swiftly crawled toward them from the horizon. It was an incredible affair, more alien to 1933 than even the queer hyp-marine. Long stiff concrete appendages reached out to sea for miles, all dimly visible in reflected light. They all radiated from a comparatively small building, flat and unadorned. In the exact center of its circular flat roof was a small brightly-lit bubble, which was the control room for the entire station. All the enormous electrical energy produced by the tides at that point was wired to cities as far north as Boston, and as far south down the coast as New York.

But the immensity of the thing distracted Williams from the affairs of the moment only for an instant. He knew one important thing about the tide-station upon which he had built a plan which offered a slim hope of once again escaping the Unidum. At his order, Terry shot the plane downward, braked with the helicopters at a dragging angle, and landed on the flat roof.

"No time to talk," said Williams hurriedly as Hackworth looked inquiringly at him. "Lead the way to your friend the superintendent."

Even as the four of them raced across the roof toward a lighted alcove from which steps led downward, one of the police ships descended with roaring motors. At the foot of the stairs a figure met them panting.

"Hackworth!" he cried. "You've ruined me! I saw—the police—"

"We've ruined nothing yet!" cried Williams. "Listen to me . . . ."

In terse sentences, he unfolded his plan. Joe Manners, the superintendent of the tide-station, nodded and led the way along a corridor and then up steps. They emerged in a room of small size whose ceiling was hemispherical. It contained nothing more than a desk and chair and a panel of several dials and switches. But inconspicuous as it seemed, it was the master control-room of the station. From below, vibrating through the walls, came the hum of the giant tide-generators.

Manners closed the door they had entered and locked it. After a momentary glance at the dial readings, he turned to the others.

"The plan will work only if we properly strike fear into their hearts."

"But will there be any trouble for you afterward?" asked Hackworth.

"I think not. Little is known of the technicalities of a tide-station to the average person like the police. I will be able to lie out of it and stave off suspicion. As for the chances I take, I have good reasons of my own for wishing to help you in this predicament. You see—"

A loud knocking at the door cut him off. He signalled caution to the others.

"Open for the Unidum police!" came in loud tones from the other side of the door.

"I—I can't!" shouted back Manners with well-simulated fear in his voice. "I am in the hands of desperate men who—"

He bit off his words and choked as though threatened by dire threats. From the other side of the door the conspirators heard a jumbled murmur. Then again a voice:

"Those men, two of them at least, are criminals, sentenced to death for treason. They broke prison in Boston. They are—"

"Oh, oh, oh!" moaned Manners in mock tribulation. "What will I do! I have nothing to do with this—"

"Shut up!" shouted Williams with well-timed ferocity. He winked to the others and held up a warning finger. They would see what the police had to say next.

"Hey, you in there," came from the minions of the law beyond the door. "Surrender yourselves or it will go hard with you."

"Damn you, never!" shouted back Williams with a tone of voice that was meant to convey desperate recklessness. "Rather than go back prisoners to certain death, we will wreck this tide-station *and die in its ruins!*"

As he finished, Manners pulled a little switch which sent a crackling spark across two fuse electrodes; then he raised his voice to shouts of alarm, stamped his feet on the floor, and signalled for the others to do likewise.

"Don't touch that switch!" he cried gasping.

The police, seeing none of this, but hearing the noises of a scuffle which sounded ominous, threw their weight against the door and attempted to batter it down. But the door held.

"You don't know what you're doing! You'll blow up—"

"Get out of my way—"

"You're mad to try—*help!*"

"No help for you! Nor for the police who want to capture us! Nor for *anybody* . . . ."

All these jumbled words delivered with hoarse shouts, along with scuffling noises, struck a nameless fear into the hearts of the police. The desperadoes inside the control room were tampering with electric dynamite, thousands of kilowatts of it!

Then came Manners' voice again in a piercing scream.

"The master switch!—he pulled it—let me out of here—the whole station will blow up—fools! you've got just ten seconds to live . . . ."

The police, hearing this dreadful statement, stampeded away from the door like frightened rats. If the station was doomed to crash in ruin, no need for them to lose their lives along with the insane criminals who had unleashed the titantic power.

When the noise of running feet died away beyond the door, the men in the little control room ceased stamping their feet and slapping their arms, and grinned at one another.

"It worked," chuckled Manners. Then he became serious.

"Now you've got your chance! Go to your ship—fly away in the dark—I'll turn out every light in the station—but hurry because they'll throw some searchlights down here when they get high enough. Before they do that you can take-off in all the confusion and quietly slip away. When they come to investigate, I'll tell them I saved the station just in time and that you criminals escaped—how or where, I won't say. Hurry; *go!*"

As they left the room, cautiously peering down the corridor in case any of the police had called the bluff, there came the roar of the police ships taking-off.

"No worry about them," cried Williams. "They're intent on saving their own precious necks."

Just as they reached the flat roof, every light went out; Manners had been true to his word and had timed it exactly right. Under cover of darkness, they ran to their ship, safe in the knowledge that the police would not know till too late that their prey had escaped by a ruse.

Hackworth, in the lead, jumped in. He waited impatiently for the others to join him, but to his surprise, he heard Williams' voice.

"Start the motors, Earl, and go! Get away from here as fast as you can, and head for home—and safety."

"What?" spluttered Hackworth. "And you . . . . and Terry?"

"We'll take care of ourselves. You go—no one as yet knows you're connected with this. Besides, even if we went with you, sooner or later we'd have to separate. As outlaws, we've got to escape Unitaria, and we can do that without you."

"But, Dan—"

"Go, if only for Lila's sake! And hurry, Hackworth! Any moment the air-police will smell a rat and put a searchlight down here!"

● Overwhelmed by these arguments, Hackworth shouted a "goodbye," roared the motors to life, and took the ship up and away. To him it seemed a madman's move; but to have argued with

his strong-headed cousin would have been futile. Hardly had he drawn safely away from the tide-station than hovering police ships, already suspicious that the threatened catastrophe had not occurred, cast their light beams downward. They revealed a deserted landing roof. The beams began to swing about frantically, but Hackworth was already beyond their effective range. He at least had escaped from this night's hectic mixup with the Unidum police. But how would his friends fare?

By the time the police had recovered their courage and swung searchlights on the roof-top, Williams, Terry, and M'bopo were again in the control room, facing a startled man. Manners threw his flashlight beam to each of their faces.

"The Devil take you!" he cried. "Why are you back? You will get me in trouble now if the police find me with you."

"I've changed my plans," said Williams calmly. "Staying with Hackworth would have been dangerous, not only for us, but for him."

"Good Lord!" cried Manners shrilly, "You don't think about me at all! I helped you all I could, stalled off the police at great personal risk, and now you want me to hide you, with the constant fear of—"

"We're not going to stay, Manners," cut in Williams sharply. "Listen to me: I've heard that Iceland is an independent island where fugitives from the Unidum can safely hide. To stay in Unitaria any longer is dangerous for Terry and myself. If we can get to Iceland from here . . . ."

"This is just the worst place to be for that," cried Manners. "You can't get aboard any type of transportation from this tide-station. The nearest dock is at Long Island City."

"But you have planes here, don't *you*? Your employees—"

Whatever Williams had in mind was never uttered, for the sudden harsh drone of laboring engines outside informed them that the police had returned.

Manners stared at them in speechless misery. They would all be caught together; there could be no second ruse for the police would be wiser from the first one.

"Come on, Terry," called Williams, racing to the door. "I see now it was a mistake not going with Hackworth. But still we can give the police a run-around."

They became reckless then, intent only on delaying capture as long as possible. It was senseless to think of going to the landing roof; already they could hear the murmurs and footsteps of approaching Unidum guards. Williams dashed down a corridor that led oceanward, away from the control-room, Terry and M'bopo at his heels. There were shouts behind them. The corridor opened into a long and curving chamber from the opposite wall off which led straight passageways.

"This way," said Terry suddenly, running down the hall. "There's a possible chance—"

At one of the long passageways whose end seemed lost in distance as though it stretched onward forever, he stopped and pointed at what seemed a miniature train.

"This is the tide-station's transportation system—propelled like an electro-car—with which workmen go to the different parts of these long tide-power piers, which are sometimes five miles long! I can run it—just one lever to start and stop it."

"Where does it lead to?"

"Well—nowhere. Out into the ocean." Terry shrugged. Everything was now purposeless; there was no escape—only delay.

"Come on," said Williams in sudden decision. "We'll take a ride in it. Perhaps somewhere we can hide along that five-mile stretch and . . . ."

There was nothing more to say. Anything they did now was aimless. There could be but one ending to the whole affair—eventual capture. They were merely fleeing because it was against their nature to surrender their persons meekly.

Terry pulled the lever savagely when they were all seated in the vehicle. With

but a faint hum of magnetic motors, it started, gathering speed swiftly, almost noiseless on its rubber-covered wheels. But the enormously-long cavern became resonant with the echoes that rolled back from the farther end.

The train ran on a ledge fastened to one wall of the tide-pier; not twenty feet below was the surface of the ocean, swelling toward high tide, creeping upward inch by inch. At high tide tremendous shutters would clip across the tide-pier dozens of feet down. The receding ocean level would then leave a titanic mass of water captured in man-made reservoirs, possessing terrific potential energy. How the weight of falling water was converted into kinetic energy, Williams could not see, nor did he care at the time. His mind was seething with plans and plans—how to get out of *this* predicament. He had let one good chance slip by—refusing to go with Hackworth; would another chance somehow present itself?

When the vehicle came to a stop before the end of the tide-pier, which was set with windows, they looked at one another in dismay. Down the long hallway came the sound of another train.

"The police," said Terry emotionlessly, "are right on our heels. I suppose Manners, to save his own reputation, had to give us away."

He became suddenly vehement, eyes flashing. "We're trapped, Williams! We've got a choice of two things: capture and the Brain-control death, or—"

He pointed to the still, black water on the other side of the ledge-railing. It would be a quick and merciful death; at least preferable to . . . . he shuddered. Their brains! Their dead brains . . . . they would fish out the bodies and take out the brain organs and . . . .

"Don't you see?" screamed Terry suddenly. "Even that way, the Unidum will carry out its sentence . . . . Brain-controls! . . . . there is no escape. There was no escape from the beginning! Williams, we—"

Terry felt a hand shaking him by the shoulder, a strong hand. There was a voice too, an imperative voice, asking him something. The agonizing grip of terror loosened the young chemist's mind and he heard.

"Terry! What are those lights out there beyond the tide-pier?"

"Lights?" Terry looked. "Moored seaplanes—private craft mainly."

"Terry, can you swim that far?"

"Whether I can or not, I'll try it," answered Terry, thinking of the oncoming police.

In a flash they were imbued with new courage. The black of despair had turned to a gray dawn of hope. They stripped to the skin and threw the clothes over the railing into the water. M'bopo went first through an opened window. Terry poised a moment before diving, shivering. Before Williams joined them, he looked down the passageway. He smiled in satisfaction; the police were still too far away to be distinguished in the gloom, and conversely, they could not have seen what their quarry had done. He closed the window hanging by tooth and nail on the sill; let them think the prisoners had drowned themselves inside. Then he dove downward.

He came up gasping in the cold water. Calling softly to his companions, he struck out for the brightest of the lights which danced on the choppy water far out in the gloom.

"Take it easy," warned Williams. "Conserve your strength. It looks like a long swim."

Terry gasped a reply and changed to a smooth side-stroke. Williams drew back of him and uttered a few dialect phrases to M'bopo. The black man, gliding along easily, obediently crawled to the side of the young chemist and let him set the pace. That this would be a test of stamina, Williams knew. And that Terry would be the first to weaken, he knew also. As for himself and M'bopo, their tireless bodies, jungle-trained, would stand terrific punishment.

Hand over hand, breath after breath, they fought the ocean with its shoreward tow and chilling bite. Choppy waves

seemed spitefully intent on choking them and pushing them under. It was an ordeal to test any man of strength. And the bobbing lights ahead seemed to dance ever farther away.

It might have been an hour later—or a year, for all they knew—that Terry spluttered violently and stopped.

"I can't go on!" he gasped between clenched teeth and blue lips. "Goodbye . . . . I'm done. Maybe you can . . . . make it . . . ."

As though it were a signal, Williams and M'bopo swam to either side of him.

"Here, Terry . . . . one hand on each . . . . of our shoulders. Look, we're almost there!"

Terry wondered if it could be true; he had not the strength to raise his head and look. He held on to their shoulders grimly, incredulous that they still had the spirit to go on when he was completely fagged. Under his aching fingers he could feel the rippling of powerful shoulder muscles. Could they go on much longer?

CHAPTER X

A Chance Friend

Ages later Terry felt a change in the motion of the swimmers at his side. A voice that seemed miles away spoke.

"Sarto!" gasped Williams. "We've reached something."

The words startled Terry. He had forgotten that they had been swimming to a destination. He shook off his numbed lethargy and raised eyes that smarted from the salt water.

"The sea-plane dock," he mumbled as clearly as he could. "Climb up . . . . and rest." Even as he said it, he wondered how it would be accomplished, for the floating dock's level was three feet above. He heard splashing and saw M'bopo leaping out of the water with frightful contortions in the attempt to catch the dock edge. Finally he made it. With a spasmodic jerk that must have taken super-human effort, he pulled himself up and rolled over onto the dock.

In another moment, with the help of M'bopo reaching down, the two white men rolled onto the wooden surface. For five long minutes only stertorous breathing and spasmodic shivers occupied them as they lay flat, regaining their sadly taxed energy.

The dock they were on was in reality a giant raft, anchored securely. Cut into its edges were spaces long and broad enough to admit the pontoons of seacraft. It was a public service for those who owned sea-planes and wished to moor them temporarily. Each of them twinkled with red lights at the wing tips.

Williams was the first to stagger erect. He pulled Terry to his feet and made him jump around violently to circulate sluggish blood. M'bopo joined them. The exercise helped greatly to revive them, even though the cool night breeze now threatened to freeze them by the process of evaporation.

"Let's go," said Williams, controlling chattering teeth with great effort. "Must get a ship . . . . invade it . . . . fight for it. M'bopo—" He finished with dialect that brought a gleam to the black man's eyes.

In the deep gloom that lay over the entire floating dock, they made their way toward a tri-motored craft a hundred yards away.

As they walked, Terry licked stiffened lips and worked tightened jaws.

"Williams, listen to me," he finally said. "They're moored with two ropes from pontoon-stays to dock-posts. Must loosen them."

Williams nodded. "But first we storm the cabin."

He cursed when they reached the first plane. Its cabin was dark and the doors locked. They went to the next and it too was empty and locked. At the third there was a light from inside and the sound of many voices.

M'bopo looked inquiringly at his master, but the latter shook his head. A dozen or so men were more than they could handle.

The fourth was a small ship, twin-motored.

"Here we go," said Williams. "I'd rather fight than freeze."

He jerked open the cabin door and plunged in. Terry, crowding in after M'bopo, expected to hear shouts and cries, but all he heard was a muffled gasp and a crack of fist on flesh. Then he saw Williams' face grinning back at him.

"Only one man," he said. "And I took care of him. Now to warm up."

The cabin, comfortably heated, seemed like bliss after the freezing they had undergone. For a long while, they all relaxed in wordless ecstasy. Crumpled on the floor was a man whose upturned face still had a look of stunned surprise on it.

The warmth gradually soaked through their blue skins and loosened their tongues.

"You can fly this?" asked Williams.

"I think so. Controls look very similar to land-craft."

"We must go as soon as possible. Unitaria is no place for us at present. I know—" Williams added at the frown on Terry's face—"that you are thinking of Lila and hate to leave for that reason. But we would be courting capture around here. We can hide safely in Iceland. As for what to do about Lila: first we must wait till we hear from Andrew Grant. If he can't get her release, we're going to do our best to get Lila spirited away to Iceland. That was why I wanted Hackworth to get away, so that he can plan on that. So far all has gone well enough—"

He stopped short at a sudden sound of laboring airplane motors, which he knew only too well meant a ship landing. Terry, peering out on the long stretch of dock, turned with dismay in his face.

"A police ship!"

Williams sprang to look and saw a striped ship bouncing to a stop near a housing whose windows shone with interior lights. Five uniformed figures leaped from the cabin of the plane and banged on the door of the housing. The lone attendant of the seaplane mooring came out and they engaged in gesticulating conversation.

"Then the police are not so simple," muttered Williams half to himself. "They have come here on the chance that we did attempt this swim and succeeded."

"We should have suspected they would," said Terry. "The Unidum guards are noted for their efficiency. I wonder just what they'll do."

Williams was staring out to see. He saw the police leave the vicinity of the housing and head rapidly for the first of the moored craft, followed by the attendant. They disappeared in the shadows of the ship but emerged a moment later to walk toward the next plane.

"Damn!" breathed Terry who had watched this over his companion's shoulder. "They're looking in each ship. They'll find us! We've got to hide!"

"No use," said Williams quickly. "Not enough time. And no place that I can see, anyway."

"The rear supply hold—but no! It won't hold all of us. Williams, we've *got* to do something—"

"And we will do something! Terry, start up the motors. Be ready for instant take-off. M'bopo and I will loose the moor-ropes."

"But man! They'll hear the engine noise and dash over. With their lightning pistols, you two don't stand a chance—"

"Got to fight for it, Terry. Only hope left. You start the motors and leave the rest to us. If you hear me shout, give her the gun." He shot clipped Bantu phrases to the black man in the same staccato voice.

Terry opened his mouth to remonstrate, but they were gone. For a moment, he thought of leaping out to help them, then decided to follow Williams' instructions. Williams had seemed to have a peculiar knack for thinking of workable plans on the spur of the moment; perhaps again luck would be with them. Terry grasped the starter switch and closed it. With a coughing roar, the twin motors hurled their powerful voice across the water.

Even before Terry had done this, Williams and M'bopo had unhooked the

mooring ropes from the pontoons. At the former's low-voiced command, the black man raced around the back of the ship to where his master was, and together they crouched in the deep shadow of the plane's one wing, nearest the group of police. They waited, eyes on the uniformed guards, like panthers at a zebra watering spa. For a moment, Williams was transported back in time twenty years when he and a brawny black had ambushed a party of marauders under the shadow of a huge tree and fallen upon their backs with such fury as to completely rout them.

At the unexpected roar of the motors, the police had whirled in surprise, lightning-pistols in hand. At a shout from their leader, they sprang forward, intent on capturing the outlaws before the motors were sufficiently warmed to start. They saw nothing as they raced past one wing to get at the cabin door. The first thing they knew, two naked figures, one white and one black, had leaped among them, hard fists flying.

The onslaught laid two of the guards flat and senseless. The other three flung about with pistols upraised to meet a storm of blows. One pistol flashed harmlessly into the night air; and user crashed against the wing a second later. His last impression was the shuddery one of a demoniacal black face leering at him. The remaining two guards, knocked off their feet, bounced up again. But neither was armed; the weapons had flown out of their hands. Skilled in boxing, they held their own against the attackers. Williams and M'bopo began to take jolting punishment. Out of the corner of his eye, Williams saw the attendant, who had been hanging back, run and stoop for one of the dropped lightning-pistols. If he should get it and . . . .

It was time for super-action. With a savage grunt, Williams lowered his head, and unmindful of a stunning rabbit punch from his antagonist, grasped him about the thighs in a bear hug and heaved mightily. With a half-whirl of his body, he flung the helpless guard away from him in the direction of the attendant just as the latter fired. The policeman sagged paralyzed, taking the full charge, and before the pistol spoke again, Williams had bounded over him and bowled over the attendant with a terrific blow to the chest.

● He whirled to see M'bopo arising from where he had just squeezed the breath out of his adversary with scissored legs and strong fingers.

"Ulak g'nol?" he grinned. "Any more?"

Terry, sitting at the controls in apprehension, unable to hear a sound above the engine noise, heaved a sigh of relief as the somewhat battered faces of his two companions appeared at the cabin door.

"Let's go," shouted Williams, "before some more police ships come up."

Terry pulled the ship gently along till the edge of the dock appeared and then opened the throttle. In another minute they were off the water and rising rapidly. Williams looked back and down at the dwindling dock and then at the huge tide-station on whose flat roof were numerous dots—the rest of the Unidum fleet. He laughed suddenly with animal joy.

"We've given them something to think about," he said above the engine noise which had become a steady drone. He laughed again and the other two joined him; it was the reaction to the excitement of the past hour.

"Now to be serious," said Williams finally when their laughter had died. "Can you find your way to Iceland?"

"I'll have to guess at it," admitted Terry. "But we'll find it. There's plenty of fuel—enough to go to Europe. I'm not worrying about ourselves; we're safe now. But I wish I could be sure Hackworth got away safely."

"Beyond a doubt," said Williams confidently. "With no excess weight in the ship, he must have been able to make a speedy get-away."

He shook his fist in the direction of

New York in a sudden reversal of thought. "Brain-controls, eh? Make us victims of the most inhuman thing ever seen on the face of earth! Not while I—"

He broke off and turned his head. In the corner of his eyes he had seen the former occupant of the plane stir. He now saw the fellow rubbing a tender jaw and sit up.

Williams watched him curiously, wondering what he would say. He seemed about middle-age, sturdy of body, and possessed of a pair of remarkably penetrating dark eyes. Those eyes now gleamed at Williams with dazed perplexity.

"I seem to have acquired a voluntary pilot," said the man in a slow, drawling voice.

"Yes, and two voluntary passengers," returned Williams grimly. "For your benefit, we are heading for Iceland. We mean you no harm. At our destination, we will give you back this ship."

"You are fleeing from the law?" queried the other, raising himself to one of the side seats.

"Which is no business of yours."

"And you were sentenced to death and the Brain-control?" asked the man calmly.

Williams started. "You heard us—Well, as long as you know, what difference does it make?"

"Perhaps a lot," was the enigmatic reply. "After you get to Iceland, what then?"

"Don't tell him," warned Terry suddenly. "He might cause trouble with that information."

Williams scowled. "Whoever you are, you've got too much unhealthy curiosity. Just sit down and keep still." With that, he turned away and looked to the east. The first flushes of dawn had changed the ocean to a sea of blood. To one side was the indistinct silhouette of an ocean liner, seemingly mired in the vast bosom of the sea.

Williams suddenly whirled. "Hold on there! What are you up to?"

The man, having arisen and taken a step toward the rear, halted and turned with surprise. "Why, you need some clothes, don't you?"

"We do," retorted Williams. "But I think—"

"Watch him!" came from Terry. "He might have a gun back there in the supply room."

"Just a minute," said the man as Williams advanced threateningly. "We've got some things to talk over, I think. I've been trying to think just what to do for the past few minutes, but now I've decided. I may be taking a chance with you three, but briefly, would you join an organization that will allow you to strike back at the Unidum?"

Williams stared a moment, speechless. "What organization, and just who are you?"

"John Agarth is my name," began the man, leaning toward Terry so that he could hear and motioning for Williams to come nearer. "About a year ago, a group of men met in a small city of Europe and pledged themselves to a certain cause: *to end the menace of the Brain-control!*"

"Go on," said Williams breathlessly. "You can trust us—"

"I do trust you," continued Agarth. "I seem to sense in you three a certain daring spirit which is what we want in our members. To go on: The Brain-control, aside from its hideousness, is a distinct menace to humanity. Whether or not the Unidum realizes that, it must be wiped out. To that purpose is our organization pledged. Our membership, although large already, can still use men of spirit and daring. What is your answer?"

"For my part," said Williams quickly, "count me in; and that includes my man here, M'bopo. You Terry—"

Terry was silent in thought for a moment. "As an outlaw in the eyes of the Unidum, it would be unreasonable to refuse. But I reserve the right to pursue my own affairs if occasion arises."

"Quite all right," assured Agarth. "Now here's what I have to offer in return for your co-operation: immunity from the law in secret hiding places, and the opportunity of working toward your

own salvation. If our plans go through, the Unidum decree, which now demands your life, will be null and void. Then there will be the spice of adventure—"

"Which is most acceptable," said Williams.

"And for assurance that I am not deceiving you," continued Agarth, "look at this."

He pulled a folded paper from inside his coat. It was a printed Unidum criminal notice that John Agarth, as described, was an outlaw at large.

"You see," he explained at their surprise, "I once was sentenced to die, as you were, and to have the 'honor' of submitting my brain to a Brain-control. In the early days of our organization we were over-zealous and made an abortive attempt to smash Brain-controls. Several of our members—" his voice rang bitter—"were executed; the rest of us were rescued in a bloody jailbreak. From then on we planned more secretly and cunningly. We call ourselves the Brothers of Humanity. I will explain more in detail some other time. At present, I think you men had better indulge in sleep! I can see you are weary. I'll take the controls."

As he replaced Terry in the pilot seat, he rubbed his sore jaw ruefully. "I can say one thing, Williams; you gave me the surprise of my life back there at the floating dock. I was waiting for a secret word-of-mouth message from New York. Little did I expect a naked man to suddenly jump at me and knock me out."

"Of course, under the circumstances, you understand—"

"Perfectly," assured Agarth. "And as for the message, it will get to me eventually with a little immaterial delay. I was really there more in the spirit of adventure, hanging right under the Unidum's nose so to speak, than because of necessity."

They felt the ship swerve. "Instead of Iceland, we're going to our headquarters in Paris," explained Agarth. "It is secret and perfectly safe."

Terry was already fast asleep on the floor. Williams, before he too succumbed, found a moment to revel inwardly in the thought of a pleasing future. What kind fate had saved him from the Unidum and brought him within reach of the opportunity to strike back? How would it all turn out? What to do about Lila? Unanswerable questions they were, that put him to sleep. Beside him lay faithful M'bopo, more worn and battered than any of them, content that *Orno Akku* was still alive and free.

CHAPTER XI

Through the Stratosphere

● "I have both good and bad news for you," said John Agarth, coming upon Williams and Terry conversing together in a room of the secret headquarters of the Brothers of Humanity in Paris.

"From Hackworth?" queried Terry eagerly.

Agarth nodded and handed him a sheet of paper. "I got in touch with him through our secret communication channels. The message was in code but I have had it decoded for you to read."

Terry read it aloud to Williams. The gist of the missive was that Hackworth had made a clean escape from the police at the tide-station, that Lila was still peacefully asleep to the exasperation of her doctors, and that Andrew Grant had admitted his absolute inability to get Lila's release from the Eugenics Law. At the end of the message, Hackworth wanted to know—already knowing that they were safe from capture—what Williams and Terry planned to do next.

"I don't think there's any dobut about what we plan to do," said Williams. "Hunted outlaws as we are, we will work toward the goal of the Brothers of Humanity. As long as Lila is safe from her pre-ordered fate, you, Terry, can feel free to help in the great cause. Let's see now . . . . Lila has been in a coma for ten days. For ten days the Unidum's best medical men have puzzled over her case and failed to awaken her. That is indica-

tion enough, I think, that the drug is beyond their knowledge and remedy."

"And only I," half whispered Terry, "only I can awaken her!" He looked up at Agarth with shining eyes. "I hereby pledge myself as a member of the Brothers of Humanity."

"Good," said Agarth. "You will be duly installed in our records. And I have a little surprise; instead of merely becoming one of our many members without authority, each of you will be invested with the authority of what we call 'Marshal.' As I've mentioned before, the Brothers of Humanity has an orderly, semi-military foundation. At the head are the two Generals; next in authority are five Majors, of which I am one; then come the Marshals, at present ten in number; then come Captains, Lieutenants, and finally the Brothers."

"But why should Terry and myself get such a distinction as marshalship?" asked Williams perplexed. "We've just joined the Brothers of Humanity, and so far haven't done a thing. In fact, up till now we've been just a lot of worry and expense to you, Agarth."

"But you *have* done something," contradicted Agarth smiling. He turned serious suddenly. "Let me explain. You have been instrumental, whether wittingly or not, in gaining two important members to our organization. I refer to Andrew Grant and Joe Manners!"

Williams and Terry gasped aloud. "They are now Brothers?"

"Yes, through you. You see, for some time, our agents, who are constantly trying to enlist influencial men in our Brotherhood, had been surreptitiously approaching both those men. Yet not till yesterday did either of them actually yield; Grant because Terry's poignant plight had touched his heart; Manners because he suddenly saw how cruel the Unidum was in sentencing you two to death and worse. Both Grant and Manners are important additions to our Brotherhood, especially the latter who controls the life-current that pours into New York."

"Manners is in no trouble because of us, is he?" asked Williams.

"No, I have already ascertained that; although there was suspicion and pressure against him at first, the Unidum finally took his word for it that he had nothing to do with the escape of three 'vicious criminals,' namely yourselves."

Agarth turned to the door. "Excuse me. I must attend to some important business. I'll be back to have dinner with you."

When Agarth had left, Williams turned to Terry. "I can't begin to tell you how glad I am that events led to this, Terry. From the moment I heard that my sister's . . . . brain . . . . was in a Brain-control, I felt I could never know a moment of peace till I had done what I could to end the purgatory in which she must live. And those hundreds of other brains! —it's ghastly! Some kind fate has preserved me and made it possible to help end the enslavement of the brains! To that I now dedicate my every effort, and if need be, my life!"

"And I too," said Terry. "I find it hard to understand now how I, not ten days ago, resigned myself so abjectly to the course of things. For years the thought of the Brain-control in Branch E where I worked had bothered me. Then when the great blow fell and Lila was torn away from me by the Eugenics Law, I seemed to break like a dried reed. Only when you, Williams, there at the hyp-marine dock, unfolded a plan to save Lila, did I awaken from that mental lethargy. Now I see how mouse-couraged I was. And now I am determined, as are all the Brothers—and as every soul in Unitaria should be—to do my part in this crusade to end wrong!"

It was three days after the episode in the tide-station that these conversations took place. While Terry and Williams and the faithful M'bopo had slept, weary and bruised, Agarth had flown across the Atlantic toward Europe. Landing in a hidden bay on the shores of southern France (which was a state of Unitaria roughly corresponding to the France of pre-Unidum times), they had been driven

to Paris by agents of the Brotherhood in an automobile, speeding along the superhighways at two hundred miles an hour.

The new Paris with its spanned towers and spires and comfortable residences had shifted a few miles northward, leaving the old squalid and dirty city deserted and falling to ruin. This old section had been completely surrounded by a ring of underground strongholds forty years before when a Hitlerized Germany had threatened to once again "march on Paris." They were camouflaged from above, entered by means of narrow tunnels whose mouths were concealed by bushy trees and hedges. In one of these, the Brotherhood had set up a headquarters, unmolested and unsuspected by the Unidum. The underground chambers were roomy and well-ventilated and afforded an ideal habitation for such utter secrecy as the Brotherhood needed.

From this headquarters, Agarth and his agents had for months been gradually spreading the invisible web of the Brotherhood over all of European Unitaria, working hand in hand with four other centralized units in the continent. The superior headquarters of the Brotherhood, where the two Generals of the organization guided the whole movement, was located near San Francisco on the western coast of America. The Brotherhood had its main strength concentrated in that part of America west of the Rockies, where it was rumored the people had always been bitterly opposed to the usurpation of rights that the Unidum had practiced of late years.

The primary purpose of the organization of the Brothers of Humanity was to end the enslavement of the brains. To this purpose had Agarth and the many disciples of their cause devoted themselves. After the first sporadic attempt to smash all Brain-controls, which ended so disastrously, Agarth and those who had escaped had conceived a new and far cleverer plan. To achieve it they needed a large membership of staunch adherents. Then, on a certain date, at a certain hour, members of the Brotherhood were to enter every one of the two thousand Brain-control chambers in Unitaria, and simultaneously ruin them by opening the nutrition boxes and injecting a virulent poison into the fluid pumped to the brains.

This in itself was merely a gesture, announcing that the Brotherhood had declared its existence to the Unidum. Then, with every Brain-control inert and useless, the Brotherhood was to arise and defy the Unidum to ever try again to set up Brain-controls. The leaders of the Brotherhood were confident that public opinion would sway their way. Accordingly, the Unidum, suddenly confronted with such purposeful antagonism, and realizing that counteraction would precipitate a bloody revolution, would be forced to accede to the demands of the Brotherhood.

When Agarth joined Williams and Terry at dinner that evening, the conversation hinged around the great day when the Brotherhood would drop its mask of secrecy and face the Unidum.

"Just how," asked Williams, "will the poisoning of the brains be done?"

"Well, that was one of our greatest problems," answered Agarth. "It has to be done efficiently and without a hitch. Only by demonstrating to all Unitaria, the masses as well as the Unidum, that the Brotherhood is a powerful organization, can we hope to win out. The burning news that will fling to all Unitaria—'ALL BRAIN - CONTROLS RENDERED USELESS; ORGANIZED GROUP DEFIES UNIDUM TO RENEW THEM'—will cause the majority of citizens to flock to our banner. But if we render useless only half or less of the Brain-controls, the Unidum will laugh at us and destroy us, knowing the masses will have no confidence in us. In plain words, that first open move of ours must be complete and efficient.

"Sadly enough, this can only be accomplished at the sacrifice of many lives. *Every man who goes to poison a brain on that great day will go a willing martyr!* You see, the only practicable way to destroy the brain in a Brain-control is by

poisoning. And to do that one has to open the nutrition box. And the opening of that rings an alarm. So the poisoner will be captured in each case. The Unidum will execute them summarily *without trial!*"

"Is there no way to open the nutrition boxes without ringing the alarm?"

● Agarth shook his head. "The metal of the boxes is an alloy impervious to all chemicals, to heat-torches, and to mechanical violence. Hence the only way to get at the pump inside is via the lock and door. Since the lock is too intricate to pick, it must be forced. For that purpose, each of our men on that day will have a small tool with spreading prongs which will be given a terrific leverage by means of a draw-screw. This, inserted in the key-hole will force the tumblers of the lock and allow the door to be opened. But the insertion of anything in the key-hole that conducts electricity immediately rings the alarm. However, each man will have time enough to inject the poison before the guards come, but not time enough to escape!

"It is not a pleasant thought—all those lives to be lost. But it is the only way. No other way of killing the brain is quick and sure enough to accomplish our purpose."

Almost at the same moment Terry and Williams had an identical thought.

"The acid, Terry!" said Williams. "The one that eats steel!"

Terry nodded eagerly. "The lock mechanism itself must be of ferrous metal because the impervium alloy can't be machined that finely. The acid will eat it away in a wink!"

"Yes," agreed Agarth. "But acid carries electricity. The alarm will ring just as certainly as in the other case."

Terry leaped to his feet. "Not this acid! It doesn't carry current! It is a compound of helium and chlorine; it is as non-conductive as oil! And at the merest contact with ferrous metals, it throws nascent chlorine loose, and free helium."

"Strange," said Agarth. "I've never heard of that compound."

"Very few have," said Terry quickly. "It's a recent discovery and not yet widely known or marketed. Only by great fortune did I have a bottle of it in my laboratory, which Hackworth knew about, and without which we should never have escaped prison."

Agarth now sprang to his feet in excitement. "If it's true that it carries no current, then it is truly a godsend! It may mean the saving of many lives. Terry, we must get some of the acid and test it!"

* * *

Arising from the water, a long, thin sliver of metal with wide and incredibly thin wings, left the shores of France and soared gracefully into the rosy sky of impending dawn. Its three motors sang a song of power. It ascended the crimson vault of heaven and when the air grew thin and cold, flaming gases belched from its rear, pushing it forward and upward mightily. In a grand arc, it pulled its way to the height of twenty miles and then leveled out, its speed so great that the dawn never broke into broad day to the occupants.

Inside the ship, Williams clutched the arm-rests of his seat with involuntary terror, amazed at the powerful surges that pressed his body back against the leather. At his one side, Agarth smiled a little at his tense lips and the tiny beads of sweat on his brow. Terry, at the other side, stared out the window, hardly less affected than Williams, although he had had a ride in a stratosphere ship before. In a seat immediately back of them sat M'bopo, not terrified, but with his simple thoughts all jammed and incoherent at the experience.

"Sarto je Brul" muttered Williams. "I feel like I'm going to Mars at a million miles an hour."

Agarth chuckled. "Yes, I know, Williams. Everybody's first trip in a stratosphere rocket ship is a terrifying thrill. The grand upward sweep, the throb of

power at the back, the pressing hand of inertia . . . ."

They were bound for San Francisco and the main headquarters of the Brotherhood in one of the organization's rocket ships—the fastest mode of transportation in 1973. Having completed his organizing work in Europe, Agarth had left the Paris headquarters in the hands of others. All the higher officers of the Brotherhood were now converging on San Francisco, to await the Great Day, which was only three days off. In Europe under Agarth's guidance, hundreds of grim Brothers of Humanity awaited the zero hour when they would saunter into the Brain-control chambers as casual visitors and then at a certain hour do the deed that was to end the Enslavement of the Brains.

In an hour, the rocket ship had reached its high cruising level. Artificial air pumped through the air-tight cabin. Heating units hissed softly and kept out the cold of the upper reaches. The pilots, after reaching a velocity of a thousand miles an hour, throttled the rockets to the point where they did nothing but keep the speed constant.

Then it was easier for the passengers. The awful backward pressure let up and constricted chests were able to breathe naturally once again.

"We will be there in seven hours," said Agarth. "Eight thousand miles in eight hours, counting the hour to ascend."

"And I thought the hyp-marine was fast!" commented Williams.

The panorama revealed to their eyes was awesome in its grandeur. The flush of their permanent dawn suffused the scene below with its undulating billows of clouds. At times, a wide rift in the cloud-bank would unveil the shimmering green of endless ocean. The hint of vast distance was there. Williams felt that he was looking at earth from another planet through a telescope. Above and around, the stars shone as brightly as light globes. And even when the dawn slowly caught up with them and pushed the rim of the sun above water, the stars continued to shine defiantly.

"Some rocket ships have ascended as high as two hundred miles," said Agarth. "At that height, one is in space to all practical purposes and the corona and halo of the sun fail to dim the stars."

"Have any rocket ships gone to the moon or some planet?" asked Williams.

"They have gone but never returned. There is no case on record yet of any party arriving successfully and signalling back from the moon. One unfortunate space-pioneer ran out of fuel just in time to fall into the moon's gravitational field and become its satellite. Astronomers today in the big telescopes can see his tiny ship swinging eternally in a narrow orbit —a wandering coffin."

At the mid-point of the ocean, Williams espied, through broken clouds, a sizeable object apparently floating on the surface. At times, a red shaft of the sun's light would reflect from it.

"*Sarto!* What is that?" he asked. "To be visible at all from this height, it must be a monstrous thing."

"That is a pet experiment of the Unidum Scientists," answered Terry, after fixing his eyes to the object. "There is a great deal of secrecy about it. It is supposed to be a plant to produce energy from sunlight. The set-up of mirrors is on a raft a quarter-mile square! The mirrors collect the sun's rays not only from above, but from below—those reflected by the vast body of the ocean when the face of a wave turns right. At any one moment, countless square miles of wave faces reflect light to that set-up. It collects them, and also the direct rays, and converts them into energy. It is still experimental, but I hear the Unidum has high hopes in it. It has cost them years of labor and scientific effort. There are always dozens of Scientists aboard and many more skilled tradesmen."

"If the Unidum would only concentrate itself more on things like that," interjected Agarth, "instead of on an inhuman scientific mistake like the Brain-control, it would be all right. That sun-power affair, when and if it becomes practicable, can do only good."

"Unless they think of installing a few Brain-controls there too," said Williams deprecatingly.

High over the American continent flashed the rocket ship, passing once another but much larger stratosphere plane. It was cloudy weather over most of the land, but Williams could see by the way the towns and cities rolled up and then down the horizon that they truly had a terrific speed. When the Rocky Mountains came in sight, the rocket blasts died out altogether and the ship began to settle downward. The pilots turned and said something and Agarth showed Williams how to turn his seat around so that he would face the rear. He saw a good reason for that not long after when the ship fell into thicker air and began to decelerate mightily.

For long minutes, Williams felt that a gigantic hand was pushing him up into the sky. Then there was a cough from the front and a moment later the engines burst out in a powerful whine. For a half-hour they passed through swirling clouds. Suddenly it was clear and Williams saw the wide bosom of an ocean rise to meet them. A slight bump and swishing slide through water. Then silence and rest.

"Here we are," said Agarth, springing up. "Behold, the Pacific on the left. Behold, the first hour of dawn. We left at dawn and arrive at the same time!" He chuckled and opened the door, revealing a wooden dock. "We are a hundred miles down the coast from San Francisco. A Brother is awaiting us with an auto in which we will drive to the Brotherhood's headquarters. There you will meet the two Generals whose sagacity and zeal have made possible our crusade."

CHAPTER XII

Daring

● In the terrible All-Nations War of 1936-38, Japan, mightily armed and possessed of a formidable war-fleet, had attacked the United States and taken over the whole western sea-board in a short month. When a hitherto lax war department of the latter nation had aroused itself and decided to take back the territory, it was found that the enemy had ensconced itself securely in underground strongholds. They were just as determined to hold what they had gained as the rightful owners were to get it back. The final result was the same enervated deadlock that occurred in Europe.

With the advent of the Unidum, the yellow enemy retreated, fearing attack from Europe by way of Siberia. But their elaborate camouflaged strongholds remained, a symbol of the war-fever that had very nearly destroyed all civilization. In one of these, near the city of San Francisco, the Brothers of Humanity had set up their main headquarters. There were no highways near it, and from above, it was invisible. Supplies were brought in, and agents arrived and left in all secrecy. Had the Unidum so much as suspected that such a nest of conspiracy existed, they would have borne down on it in full strength. That there had never been betrayal showed how cautiously the Brotherhood worked, and how staunch were its trusted members.

Williams looked with awe upon some of the rusted cannons which were scattered throughout the caverns, separated from the light by traps which could be opened by the pulling of nearby chains. Not four decades before they had belched flame and smoke at besieging armies. Agarth led them through passageways that connected bomb-proof chambers far beneath the guns. There was a smell of mustiness pervading the air they breathed, as though decaying bones in far corners had never been cleared away. Now and then a man passed them, saluting respectfully to Agarth. In several lighted rooms whose doors were open, Williams could see men laboring with papers and codes and radio instruments. This was the core of the network of the Brotherhood.

Finally, Agarth knocked upon a door.

"Come in," said a man opening the door. "The Generals are expecting you."

It was a large room whose clay walls had been bolstered with concrete. At the far end several men sat at crude tables, writing. At the near end against the wall was a desk at which sat two men who now arose to meet them.

"Major Agarth, welcome!"

Agarth saluted, then turned to introduce Terry and Williams to the two Generals, Hagen and Bromberg. Terry gasped at the names.

"Hah!" said Bromberg. "You recognize us by name?"

"Yes, I—I believe I do!" stammered Terry. "Professor Bromberg and Doctor Hagen were the two Scientists who wrote the monograph on the After-Life of Brains in the Brain-controls, and who were impeached by the other Scientists and then disappeared!"

"Exactly," agreed Bromberg. "Seat yourselves, all of you."

He continued: "Yes, we are those same two Scientists. Three years ago we made our investigations and published our results, thinking that they would cause the abolition of the Brain-controls and bring honor to ourselves. How different it was! We were arrested, dragged before court . . . . oh, the misery of it—as though we had been common criminals! We were exiled to Asia because Scientists cannot be executed by law. There for two years we labored for the Federation of Asia as honored savants, but the disgrace of our banishment rankled in our hearts. Then we became imbued with a desire to end the enslavement of the brains. We heard of the attempt of Major Agarth and his men to smash Brain-controls, and got in touch with him after their sensational jail-break. The Brotherhood was then organized. And three days from now, may fate smile upon us, we will *end the tyranny of Brain-Enslavement!*"

Both Bromberg and Hagen were well past middle age. The former was of an exceedingly grave demeanor, quiet and seemingly meek. The latter, on the other hand, was a fiery soul,, excitable and talkative. His dark eyes gleamed with almost a fanatical light. As he spoke, he waved his hands in emphasis.

After his short speech of introduction, Bromberg brought his voice down to normal as it had risen to emphatic thunders.

"Marshals Williams and Spath, we give you welcome into our organization. I know already a great deal about you; Major Agarth has sent me relevant details via code. As doomed by the Unidum to be the victims of *more* insidious Brain-controls, you are doubly welcome. With the formula you sent a week ago for the new acid, we have already manufactured and sent from our laboratory here bottles of the compound to all our various agents in Unitaria. The results of your tests also indicate that we will strike our first blow against the Unidum without their knowing it until it is too late even to apprehend the various men who will poison the brains. The first thing they will know, the machines in the food plants will begin acting strangely. They will investigate, perhaps not till hours after the poisoning. Ha! They will see the lock corroded; they will open it; then they will know!"

Bromberg's eyes glistened in joy. Then he turned to exchange a few phrases with Hagen.

"General Hagen wishes to confer with Major Agarth. If you, Marshals Williams and Spath, and the black man, care to have lunch with me . . . ."

After assenting, they followed Bromberg from the office to a nearby dining chamber.

Bromberg ran an approving eye over Williams. "You are a brawny man, Marshal Williams. Agarth tells me you have been in Africa the past forty years. One could tell you have led an active life. And your escape from the Boston prison and the run-around you gave the police, ha! —remarkable. Are you a man of luck, or great enterprise?"

"A man of quick wit and sudden plans," said Terry quickly, sincere in tone.

Williams flushed under his African tan. "I think luck plays a great part in my

life, General. Otherwise I should have been dead in Africa years ago."

Bromberg nodded. "I only hope you have brought some of your luck with you into the Brotherhood. Perhaps . . . . perhaps we'll need it. The Unidum may react differently to our first bold stroke than we think. It may be that already the seed of corruption has grown . . . ."

He paused, then: "Let me tell you some things about the Unidum. I was in the Medical Bureau for years and learned a lot. The Unidum of today is heading towards tyranny and decay and the first signs of it are the Eugenics Law and the Brain-control innovation.

"It is sad but true that no matter how noble or idealistic a new regime starts, it invariably falls into corruption after a time. When the Unidum arose in 1943, it was the greatest single advancement civilization has ever known. Its members were the souls of integrity, the most intelligent, noblest of the entire federation. They founded a totally new type of government and gave it a hearty start that carried it safely to 1963, ten years ago.

"Then came the Eugenics Law, a wonderful idea but applied so heartlessly and wrongly. Scientific eugenics will some day remodel the world into a finer, better and saner place; the average intellect will rise; cripples, lunatics, deficients, will disappear; people will be born more nearly equal. But a Eugenics Law which begins with tyranny, as the present one has, can only do questionable good because it undermines the morality of all concerned. Loveless marriages are a return to feudal aristocracy with all its evils.

"Previous to 1963, the Unidum had worked like a clock. But after the passage of the Eugenics Law, there arose dissention in the government; many of the Scientists, Hagen, and myself included, were opposed to the Law and wished it taken out. However, the other faction prevented such a move. Then five years later, the second great blow fell—the enslavement of the brains!

"Now what the masses do not realize—and even what many of the Scientists do not realize—is what that would eventually lead to: *A cold, inhuman, scientific social system in which the 'Scientists,' rapidly increasing in number through the application of the Eugenics Law, will completely dominate a dwindling citizenship whose brains will go after death to run the machinery of the world! The result in a few centuries will be a world of men who will call themselves 'Scientists' but who will be slothful mental monsters, living like decadent gods in a completely mechanized world, falling to certain decay!*"

● The others had stopped eating at these astounding words. They listened open-mouthed as the fiery professor continued.

"And the whole diabolical scheme originated in the mind of but *one man*—the present Executive Molier of the Unidum. It was *he* that perfected the brain-rejuvenation process. He must have conceived his plans long before he became Executive. His is one of those minds that, in their ruthlessness and power-lust, can form the future of civilization. His co-partner, Executive Ashley, is a mere puppet, powerless against Molier's superior will. It is the latter who truly dominates Unitaria today. And by his persuasive powers, his subtle propaganda, he has begun the corruption of the erstwhile noble Unidum. If not checked, he will lead them to absolute tyranny and eventual decay."

Bromberg paused and lowered his voice to normal. "I see by your faces that these are unexpected revelations to you. And well they may be, for very few outside of the Brotherhood have even the vaguest suspicion that a black cloud has darkened the future. You wonder too how it is possible for one man to carry forward such fiendish plans. You must understand that the Unidum, in order to exercise its Utopian principles and forge ahead rapidly, had invested absolute authority in the central government. It controlled all industry. It limited private wealth. It supervised transportation and communication. And it gave to the two Executives

dictatorial powers! It has long been the custom for the People's Parliament to copy-cat every move of the House of Scientists. With the latter legislative body dominated by Executive Molier, it has been easy for him to get the Eugenics Law and Brain-control Act through.

"Yet so cleverly has he acted that very few indeed see the Nemesis behind it. He has made the people believe that the Eugenics Law is commendable—more Scientists, more advancement. As for the Brain-controls: more of them, less work for the people."

Bromberg waved them back to their food. "But what evil has been done can be undone. The Unidum is not yet corrupt; Molier has only made a start. Once his power is broken, all will be well. That is the primary purpose of the Brotherhood—to strike at the vitals of Molier's insidious scheme, the Eugenics Law and the Brain-control Act."

"But isn't the threat of tyranny sort of unreal?" asked Williams. "After all, Molier is but a man; he must die soon. After his death will not the whole scheme puff away like a breath of foul air?"

"You don't know Molier," returned Bromberg. "His evil genius foresees that his perverted ideals must live after him or his work is for nothing. Accordingly, he has poured poisoned words into the ears of many Unidum Scientists. He has painted for them a lurid picture of a future in which the unintellectual masses will not be there to hinder the advance of Science. It is so easy to sway a Scientist with talk of Scientific Utopias. Accordingly, he has many staunch adherents; they form a sort of unorganized, yet growingly powerful, sect. Through Andrew Grant, secretary to Executive Ashley, we have obtained the names of the Scientists who are known to favor Molier. We have even learned who it is that Molier has picked to succeed him when he dies. Professor Jorgen is his name, a man hardly less cunning and ruthless than Molier—"

Terry and Williams looked at one another in astonishment. Professor Jorgen, the Scientist to whom Lila was to be married! At Bromberg's query, Terry quickly explained the matter.

"Heaven forbid!" exclaimed Bromberg, "that your sweetheart should marry such a fiend. He, no less than Molier, must be stripped of all authority and power if Unitaria is not to become a vast experimental laboratory for a group of mad Scientists."

"I wish he were standing right here in front of me," said Terry, eyes blazing. "I would smash him to pulp! I'd . . . . I'd . . . ."

"Yes, of course you would—if you could get such a chance. But not in that way could their schemes be destroyed. You two are now Marshals in an organization that will either smash Molier and save the Unidum, or . . . . but we must not admit that there can be failure. Three days from today, the Brothers of Humanity will rise in all their righteous might!"

* * *

"It is a decision I cannot make," said Agarth. "I will have to refer it to one of the Generals. Come, we will see them about it."

They left the room in which Williams, Terry, and M'bopo had slept and traversed underground corridors to the central office. Bromberg looked up from various papers with a tired smile.

"Sorry to disturb you at such a time," began Agarth, "but I must ask for your decision. Marshal Williams has made a request to be delegated to the poisoning of the Boston Brain-control!"

Bromberg turned to Williams in surprise. "What! You wish to risk your life—"

"I do," said Williams with determination in his voice. "The Boston Brain-control has in it my sister's brain. I tried to smash the globe which holds it once before, and it led to my sentence for treason, Terry with me. Since that time it has been my secret vow to release my sister from that mental torture which

you and Doctor Hagen have proven torments a brain in a Brain-control. Furthermore, I feel that I have done nothing noteworthy for the Brotherhood as yet. At least, in being one of the poisoners, I will have done my part."

"Marshal Williams," said Bromberg slowly, "I will not attempt to dissuade you, for I can understand your personal feelings about the matter. Let me shake your hand—you are a brave . . . . man."

For the first time, Terry and Williams had an insight into the humanness of the professor. Hitherto he had been merely impersonal, the leader of a great movement. Now his eye was moistened in feeling.

"And if I may make a request," said Terry, "I wish to accompany Williams!"

"Terry, no! You—" It was Williams, shaking his head.

"General Bromberg," continued Terry. "Your answer?"

"Go, and God be with you! It is such spirit as yours that will save us from tyranny. Major Agarth, attend to the details."

They left the General then, and only after an hour of instruction did Agarth leave them after a hearty hand-clasp. In another hour, Terry, Williams, and M'bopo were escorted from the underground headquarters into a cold, clear night. A silent guide took them to an auto which left the vicinity with an almost noiseless purr of its motors. Reaching the coast an hour later, they were hurried to a waiting airplane, a speedy Sansrun. In it they were to be taken to a small city in California, from thence to embark for Boston in a public air-liner. Each of the agents sent out that night to American cities for the poisoning of the brains, embarked from a different city. In Europe, the same careful system had been used.

In another ten hours, in the early morning of the next day, two thousand members of the Brotherhood would simultaneously look at clocks, open the black metal nutrition boxes after destroying the locks, and pour a small vial of deadly poison into the jar from which the pump sucked liquid food to send to the brain in the globe above . . . .

CHAPTER XIII

Death to the Brains

● "We are in constant danger of arrest," said Terry as they stepped from an electro-car in Boston, "if anyone recognizes us as the same two men who not two weeks ago tried to smash the Brain-control." His eyes searched around for the blue and red of Unidum police.

"I suppose so," said Williams, stepping forth boldly. "Yet I think the very daring of it is our protection."

Escalators took them downward. Passing a loitering policeman on the way to the food products building, Terry held his breath. Cold eyes fastened on them for a moment, then flicked aimlessly away. Terry soothed a beating heart; they were unrecognized! After all, they looked no different from the thousands of other men on the streets; and M'bopo was not the only negro in Boston. Why should the Unidum guards, intent on keeping law and order every day, be thinking only of those two, bold, bad men who had many days before blunderingly thrown a wrench in a Brain-control? Terry began to realize that it was only natural no police should stop them with an eye of suspicion.

As for them entering food products, as they now did, to see the awesome contrivance which ran dozens of machines, were there not visitors daily doing the same thing? The Unidum could have no suspicion that within an hour all the Brain-controls would cease to function. Yet the nearer they approached, the more nervous Terry became. He felt for the tiny flat aspirator in his inside coat pocket. It was there safe enough, and Williams—he had in his pocket a tiny vial of a virulent poison.

The early morning—it was only nine o'clock—had been picked for the zero hour as there were few sightseers abroad

at that time. They stepped into an empty room.

"Five minutes," whispered Terry. That closely had everything been planned.

Williams drew a long breath as he once again gazed upon the globe which held his sister's brain. He felt a fierce exultation, but the hallucination that his sister was talking to him did not come as it had that other time. He was sane and cool now. He had an important commission to perform, and it must be done carefully and quietly—no blundering and losing one's head. Agarth trusted him to do the job right.

Williams spoke to M'bopo in dialect, then to Terry. "M'bopo will watch at the far door. You stand at the near one. If all is clear, I'll go ahead. If not—we'll take the chance that all the other Brothers are taking all over Unitaria and go through with it. Give me the acid."

When Terry at one door and M'bopo at the other nodded, Williams sprang lightly to the pit level. With calm fingers, he inserted the aspirator nozzle in the keyhole of the black box and pressed the bulb. There was a sharp hiss. He glanced at the alarm bulb above; it was dark. He tried the handle. It stuck!

More acid with the nozzle twisting in his fingers. Louder hissing but still the handle would not turn! Keeping his eye on the alarm bulb, he sprayed again and again, till a strong smell of chlorinic substances pervaded the room. *Sarto!* What spiteful thing kept that half-destroyed lock from yielding? Beads of sweat were on his forehead now. He wondered if the other agents of the Brotherhood were having the same trouble.

A fierce whisper from Terry startled him. "Something coming! *Hurry!*"

Williams squirted the acid till it was gone and desperately threw his weight on the handle. With a loud click it suddenly yielded. Swinging the door open, Williams stretched trembling hands toward the foremost of two jars. Guided by Agarth's descriptions and instructions, it was easy for him to unscrew a threaded cap at the top.

"Goodbye, Helen!" he said in low tones as he dropped the gelatin vial into the jar. "It is for the best!" The action of water on the gelatin would turn it porous and let the poison out.

Williams swung the door shut and turned, ready for anything.

"Jump up here quickly," hissed Terry. "They won't know . . . ."

It was only two elderly women, loudly telling each other all about the Brain-control and too busy at that occupation to notice that two men looked flushed and excited about something. Waving to M'bopo to join them in the corridor, Williams and Terry left the chamber.

It had worked perfectly. It might be hours before the erratic behavior of the machines below would be detected. They left the building as calmly as they could and in a few minutes stepped from the escalator onto an electro-car platform.

Williams felt as though a great load had been taken from his shoulders. "It is done! It is done!" These words constantly revolving in his mind brought him a deep peace. Then he noticed that Terry had grasped his arm and was pulling him toward one side of the island platform.

"What—?"

"Didn't you hear me, man? I said I'm going to call up Hackworth, tell him we've succeeded and are all right. And . . . . ask about Lila!"

Terry stepped into a phone booth while his companions waited o u t s i d e. He emerged a minute later with a happy smile on his face. "Lila! She is still 'sleeping' soundly! Hackworth was overjoyed to hear my voice. Knowing the zero hour, he knew we must be safe. He wanted us to visit him but I told him it would be inviting disaster."

"Right, Terry. It won't be healthy for us here in Boston, or anywhere in the east in a few hours. We must get to the west coast—"

They turned startled at a shout. A man in blue and red uniform was tugging at the lightning pistol in his holster and running toward them. Already two other

guards at the far end of the platform were running to join him.

"We're recognized!" gasped Terry. Instinctively he glanced at Williams for the initiative.

The latter swept an eye to take in the scene; the long and narrow platform, sparsely populated, was a bad place to be confronted by police. Yet the escalator was too far to make a run for it. They would meet the guards at its entrance. Far down the tunnel-like span he could see an approaching electro-car in its multiple grooves. No escape—but there were only three guards to . . . .

● Williams whispered rapidly to Terry and then to M'bopo. The latter nodded with a fierce grin. Terry set his jaw grimly, pale but resolute.

The guard who had first shouted hurled explanations to the two who came up and together they ran to where the three men waited quietly.

"You're under arrest!" cried the foremost minion of the Unidum. He waved his pistol threateningly. "Better come quietly."

"Just a minute," said Williams with mock surprise. "Why are we under arrest? What have we done?"

Sensing something out of the ordinary, a small crowd formed about them. The police waved them back as they crowded eagerly close.

"Aren't you two Dan Williams and Terry Spath, wanted for treason and jail-breaking?" asked the guard, somewhat taken aback by Williams' calm demeanor. "Of course you are! I recognize your features—"

"Why . . . . why . . . . such insolence!" exclaimed Williams, looking hurt as though insulted. "Do you hear that, Briggs?"—turning to Terry—"Suggests we are those arch-criminals who tried to wreck a Brain-control!" He faced the guard sternly. "Sir, do you mean to say out of three million people in Boston you had to pick out us upon whom to practice some sort of misdirected horse-play! Really now, we resent this and shall report you!"

The guard had changed color at the bland words. The hand that held the pistol lowered in indecision. His fellow guards who had not recognized the questioned persons, but had merely flocked to their companion's aid at his shouts, looked around embarrassed at the crowd's tittering.

"Well, I must do my duty as I see it," said the first guard doggedly. "You two closely resemble those criminals. At least I shall have to ask you to come with me to the nearest police office for a check-up."

"Shall we allow this fellow to disgrace us?" asked Williams, half-turned to Terry. "Or shall we"—the electro-car had now come up and was hissing to a stop—*"Give them what they deserve!"*

It was the signal Terry was waiting for. As one, the three of them leaped forward suddenly. Three hard fists knocked three uniformed men flat. The quickness of the attack had forestalled the latter from even raising their pistols, which they had been holding loosely at their sides during the conversation.

The crowd scattered with cries of alarm, most of them toward the escalator. The rest stampeded into the electro-car, and with them were Williams and his companions. It being an automatic transfer station, there was no conductor to raise an alarm. The driver in the motor compartment, seeing nothing of the fracas, pursued his scheduled duty, and the electro-car hummed away from the platform on which lay three prone figures. One of them staggered erect, shouting futilely for the car to stop. Then he picked his fellow guards up, looked hastily for pistols which he could not find, and raced to the phone booth to raise an alarm.

Inside the electro-car, Williams, Terry, and M'bopo grinned at one another as they sat down near the exit. The few people who had witnessed the affair and knew the culprits, looked terrorized in their direction as though expecting them to jump up and begin a general massacre.

The rest of the passengers, sensing the excitement, looked around avidly curious and asked one another what it was all about.

"Safe for the moment," breathed Williams. "But they'll be on the lookout for us. We *must* get out of Boston and the sooner, the better."

"I have a plan," said Terry hurriedly. "They're liable to have guards at every station on this line, looking for us before long. In a few minutes we'll be at the next automatic transfer station. If we transfer from there to a lower level line, we'll slip out of their hands, because they can't have guards looking for us at *every* station in this city."

"Good," returned Williams. He pulled something from his pocket and thrust it into Terry's hand without revealing it to nearby passengers.

Terry gasped as he felt the smooth outline of a lightning pistol.

"Just before I ran to the electro-car," explained Williams, "I picked up two of them, one for you and one for me. They were lying there so handy and it only took me a second. How do you work them?"

"Button on the side where you hold your index finger," said Terry. "But be careful with it! The catch near the firing button has two positions: the one for a paralyzing charge; the other for a killing charge. And if we ever get caught with these—"

Williams smiled. "Terry, you forget we're already criminals with a death sentence. The possession of pistols can't make us worse felons. And we may yet have a use for them before we get away scot-free . . . ."

Terry jumped up, releasing his seat-bands, as the electro-car came to a halt. "Come on. We transfer here."

Followed by the wondering eyes of several of the other passengers, they stepped from the door. Williams glanced hastily up and down the platform and breathed in relief. Not a policeman in sight. Terry led the way to an escalator. At the next lower level he turned into a banistered walk that took them to the middle of one of three platforms. The car grooves ran into an enclosed span which right-angled the span above from which they had come.

While waiting for the next electro-car to come up, Terry looked apprehensively around, fearing that the Unidum guards thereabouts might already have received instructions to search for the criminals. An electro-car rumbled out of the rear span and stopped before them. As they entered, Terry saw a blue and red figure dash from the escalator opposite, waving its arms and shouting. But too late; the electro-car whisked away.

"They're on our trail," Terry informed Williams. "To fool them we'll skip the next station and stop at a terminal. We'll pay another fare, but take a sixth-level span; express service, hardly any stops."

There were no shouting guards at the terminal, and the three embarked safely on a sixth-level span car. It rumbled on its grooves at frightful speed.

"*Now* let them locate us," smiled Terry grimly, "with three misleading transfers between us."

"Now how do we get out of Boston?"

Terry was silent in thought for a moment. "At the next transfer station, I'll take a look at the city guide, because, frankly, I don't know where we are in Boston! Then we can get to an air-port and—"

He frowned. "Only thing is, Williams, word will have been received by now at every air-port to watch for us. There are always plenty of police at air-ports. Us three, especially with M'bopo along, don't stand a chance to get aboard without being stopped. Every train depot will have notice; so will the hyp-marine depots and docks. And there's only one way left to get out of the city—with the exception of walking, which is foolhardy—and that is by automobile."

"Then by auto it is," said Williams.

"But you don't understand! There is no such thing as public service in autos. They are all owned privately. We would have to . . . . to confiscate one, like thieves!"

"That shouldn't stop us, after all else we've done," returned Williams with a shrug.

● An hour later found them in the west suburbs of Boston, watching the sparse morning auto traffic and the occasional pedestrians. They stood under the shadow of trees whose leaves were autumn colored and ready to flutter downward at the next stiff wind. A cool breeze swept upon them from the open streets. They shivered, for they were dressed in clothing designed for warmer temperatures.

"It's not so easy," Terry was saying in pessimistic tones. "We can't very well jump into a moving car without risking our necks. Those parked are sure to be either locked or without the ignition key. We haven't the money to buy one—"

"Can't we hire a taxi and then throw the driver out?"

"Taxi? Taxi? What is that?" After Williams explained in some surprise, Terry shook his head. "We don't have such things in this day and age, Williams. People either use electro-car service, or own a private auto."

"Je Bru il Bra!" exclaimed Williams perturbed at the outlook. "Well, we can't go back to the downtown section, that's sure. A horde of vultures in blue and red are scouring around for us there. And the longer we delay here, the worse it is. Once they find out that the Brain-control is poisoned, and later when they hear that *all* the Brain-controls in Unitaria have been tampered with, Unidum guards will be looking with suspicion at everybody, us included."

After some silent thought, Williams moved away from the trees. "We've got to find an auto with keys. Perhaps if we walk along a few streets and look into all parked cars, we might find one waiting for us to jump into and go."

An hour of such searching did no good. As if fate were spiteful, all the autos were either locked or useless in the absence of a key for the ignition. Williams began to grip the pistol in his pocket tightly and cast his eye at slow-moving autos passing them. Once they got in and held the pistol at the driver's head . . . .

He felt his arm gripped by spasmodic fingers. It was Terry, his face paling. "Listen to that voice!"

They had come to one of the public News-markets, set off from the street and large enough to seat a hundred persons. It was open to the air and from the flared apertures of fan-grouped loudspeakers came the stentorian voice of the announcer.

"Boston Brain-control ruined!" blared the voice. "The brain in the globe has been poisoned! Two women found there at the time the inspection took place tearfully denied having anything to do with it. They claim three men, one of them a negro, were leaving as they arrived. Search is now being instituted throughout Boston. It is feared the three culprits have escaped for they were accosted at electro-car Station Level Four No. Ten and fled after attacking three Unidum guards. The lock on the nutrition box—"

The announcer went into detail while Terry and Williams looked at one another aghast. Already a swift crowd had jammed the News-market at the startling statements.

"Let's get out of this vicinity!" muttered Terry rapidly. "Now we *are* in for it," he continued as they turned a corner and walked away from the giant voice that was telling all the world about them and their deeds.

"And that means we must get busy," supplemented Williams. "Do it or die, for there—"

"Wait; listen!" admonished Terry.

The stentorian voice, barely audible to them now, was saying:

"—Reports from New York, Philadelphia, and Pittsburgh that the Brain-controls in those cities too have been poisoned! This seems to be the beginning of an anti-Unidum move—"

"Not to mention what they will find out when Professor Bromberg and Doctor Hagen will be broadcasting to Uni-

taria soon," smiled Williams grimly. "But now for ourselves—Terry, follow me and don't be afraid to use that pistol if you have to!"

Williams had seen an auto stop before a house a hundred feet away. Out of it stepped two men. It was the chance they had been waiting for!

The men looked in surprise at running figures coming at them.

"We need your car," said Williams without preamble.

"What is this?" spluttered one man with a scornful leer in his voice. He was tall and powerfully built.

"Hand over the key," grated Williams. "We want your car and we'll fight for it!"

The man looked around for police, and seeing none, swung a fist that missed the face it was aimed at. Then he backed away muttering at the sight of the pistol which Terry was aiming at him.

"It doesn't pay to fool with us," said Terry. "Your key!"

Reluctantly it was handed over. "I'll have you jailed for this!"

"Better men than you have tried it!" sang out Williams as the auto hummed away from the curb a moment later.

Terry drove as swiftly as he dared, winding along the streets till he struck a feeder-line to the highways outside the city. At high noon, they reached Worcester and there took passage on an air-liner to San Francisco. At that city they contacted one of the Brotherhood's undercover agents, and were driven by auto to the general headquarters. It was close to midnight when they finally entered the secret underground passages.

(Read the thrilling conclusion to this novel in the next issue.)

"THE FALL of the EIFFEL TOWER"

by Charles de Richter

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JULES VERNE

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Other stories coming up in the next few issues are:

"THE BLACK RIVER" By John M. Corbett
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DIMENSIONAL FATE

By A. L. Burkholder

(Continued from page 269)

"Just the same, we had better take a look around," muttered the one whom I had so offended.

"Have you a search warrant?" I asked.

With some hesitation, the older one admitted that they had not.

"Then, gentlemen, I regret that I must ask you to leave us alone as our experiment is a very delicate one and it is now at a very critical stage. You see, we are conducting atomic experiments and the least interruption or distraction now might spoil the work of years. That is why my partners and co-workers particularly enjoined me to admit absolutely no one tonight."

● This occasioned considerable more hesitation and discussion between them, but finally, the "chief" apparently made up his mind. He turned to me and said, "I know you and the other gentlemen who are working with you, sir, and I do not doubt your word, but we were ordered to investigate the shots and screams that were reported here and we have to obey."

"But I have already explained to you the importance of our not being disturbed," I rejoined, "and I absolutely forbid you to trespass here now.

"You all know," I continued, "that I am a lawyer of considerable standing and I promise that I shall prosecute any or all of you who may force your way in here tonight, but come back in the morning when our experiment is completed and you can investigate to your hearts' content, warrant or no warrant."

But not heeding my protests, they pushed past me into the laboratory. For a moment, I stood alone in the anteroom and I confess that I felt rather panic-stricken and was strongly tempted to bolt out of doors and do a vanishing act. But the sight of a patrol wagon and three policemen outside quickly deterred me, so I bolstered up my ebbing courage and walked, or tried to walk, confidently into the laboratory.

But why dwell upon what followed? Suffice it to say that, despite our protests, Ben Patterson and I were dragged into the waiting patrol wagon and taken to the municipal jail where we were duly quizzed and then locked up. With no chance to devise a more probable sounding story, we were obliged to tell the truth and, as I had predicted, we were disbelieved and laughed at. We were found guilty and were condemned to die by the district court and an appeal to the state supreme court yielded the same results. An insanity plea, appeals for executive clemency, everything failed. Nobody would believe us and nothing would save us, except the building of another dimension translator, which we would not do even if given the opportunity.

Well, this weird tale is drawing to a close and I hear the warden approaching, probably to tell me that the end is almost here.

THE END

Join the International

SCIENCE FICTION LEAGUE

— details and application blanks are in another part of the magazine. Read the LEAGUE department in this Issue.

A VISIT TO VENUS

By Festus Pragnell

(Continued from page 293)

"Hello, is that the receiving station on the moon? Hello, is that the receiving station on the moon? I am a man speaking from Venus."

By now the record should be started.

"A man speaking from Venus. The Venusians are waging war on earth. Their space-ships are dropping huge but light spheres full of disease-producing spores into the earth's atmosphere. You must find some way of destroying the spheres before they reach the lower levels. I don't know how it can be done."

His dry throat refused to proceed. There was no answer. There could be no answer for some time yet; so that he had no means of knowing whether his message was heard, or even whether he had succeeded in getting the apparatus to work.

His head ached appallingly, making the outlines of the room unsteady around him. He thought of his life on earth, his humble beginnings, his struggles, his colossal power that had been a colossal swindle. Ah, well, it had been so easy to be dishonest and the rewards were so huge. The world rewards dishonesty and punishes honesty; he was not really to blame for what the structure of society had forced him to; the harmful drugs sold as medicines that had been the beginning of it; the companies he had floated later, whose disappointing results he had bolstered up with ever more and more wildly inaccurate bookkeeping, assets shown at ridiculous values or included in the balance-sheets of six different concerns. Huge claims by each of his companies on the others, all remaining silent about what they were supposed to owe, auditors who had to certify what he told them or lose their means of livelihood. Weigh it all up and his life had been an utterly harmful, useless thing. The world was much worse off by reason of his life. And the others were the same. Sooner or later they crashed, and the world still blindly trusted those who managed to maintain the illusion still.

As a youth, he had longed to be great and to do good, only to find that he could not do both. Finding himself among men playing a financial game where the most unscrupulous won, he had set out to play that game well, never thinking of the human lives he was juggling with.

His pain was gone, probably a sign that the end was near. He thought of Harley. Strange how that man had dominated him, brought him on this journey that he, Loted, had known from the first could end only in the death of both of them. His own boasted power over men had only been power over their purses and food. Yet he now felt no animosity against Harley.

● Padding steps were approaching, but he knew that before they could reach him, he would be beyond all harm. It seemed to him that the apparatus itself reared up on long legs and fell upon him, filling the air with flying wheels that spun and gave off sparks like fireworks.

He felt his knees giving way, and knew his sense of balance was gone. The floor rushed up—

But he never felt it touch him.

THE END

TAINE OF SAN FRANCISCO

science-fiction's most popular detective, re-appears in DAVID H. KELLER'S thrilling story

"THE TREE OF EVIL"

— watch for it!

Science Questions and Answers

THIS department is conducted for the benefit of readers who have pertinent queries on modern scientific facts. As space is limited, we cannot undertake to answer more than three questions for each letter. The flood of correspondence received makes it impractical, also, to print answers as soon as we receive questions. However, questions of general interest will receive careful [redacted]

THE ASSOCIATE SCIENCE EDITORS OF WONDER STORIES

are nationally-known educators, who pass upon the scientific principles of all stories.

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Yale University.

Stepping on an Atom

Editor, SCIENCE QUESTIONS AND ANSWERS:

I have read stories and articles in which it is propounded that the electrons of atoms may be worlds like ours harboring countless races of people, alluding to Einstein's relativity. Then suppose I am walking along and step on a clod of dirt. Am I not stepping on those worlds and destroying universes filled with highly intelligent life, maybe? I've always been kind-hearted and the idea horrifies me. Please tell me I am wrong so that I can rest in peace. I have not had a good night's sleep since the idea struck me and walk as little as I have to, each step being very painful. It's ruining my health—I can't take those long walks I'm so fond of any more!

DON PAYNE,
Elizabeth City, N. C.

(We hope that you will recover your health after reading our answer, and put your mind at rest. You do not destroy any universes when you take a step. Supposing that you do step on atoms harboring intelligent life, the creatures on the electron-worlds would never know it. You could not disturb their happy life if you stamped for an hour. To destroy their universe would require disintegrating the atom, the dream of scientists for hundreds of years. A couple of years ago an atom or so was split, but it is a very expensive proposition and good only for the experiment. You cannot imagine how small an atom is. It has been estimated that a spoonful of hydrogen nuclei, placed side-by-side, would reach around the visible universe—over one billion light years in circumference! It would take too many lines of zeros to place this amount in miles. So sleep well and forget about the people on the atoms. They don't even know you exist.—EDITOR.)

The Temperature in Space

Editor, SCIENCE QUESTIONS AND ANSWERS:

Every so often I have some sort of brain-storm and have to pop a new question or two at you. Here's one that has bothered me for some time.

Regarding the cold—or lack of heat—of space. Why should a space-ship necessarily have to be insulated against cold when the greatest warming agent in the solar system is doing its darnedest to melt the thing? The temperature on the moon is claimed to rise to such a height as to be unbearable by humans; and yet the occupants of a space-ship, which receives the same amount of heat per square foot as the moon, are in constant danger of freezing to death! Personally, if I were to venture out into the void clad in a space-suit, I should first make certain that arrangements had been made to neutralize the terrific heat I should be exposed to, as well as the supposed cold!

Or has the sun gotten old and cranky enough to scorch only planets?

D. H. GREEN,
Beverly Hills, Calif.

(Your argument is a lot more logical than that put forth by a lot of science-fiction authors. It just seems to be a habit to believe that space is cold. Of course, space itself can have no temperature, being almost a perfect vacuum—only material things can have temperatures. Then what we want to know is, will THINGS in space be cold or hot? When the rays of the sun strike objects, they (the absorbed rays) are converted into heat. We have a blanket of air surrounding the earth which absorbs a lot of the sun's heat; otherwise, we would get it full-force and, if anything should lift the ionized layers of the atmosphere from the earth all of a sudden (purely hypothetical), everything alive would probably be destroyed by the ultra-violet rays—that is, everything exposed to the sun.

We might say, then, that objects in space near the sun would be in danger of burning or melting rather than freezing. In either case, careful protection would be necessary.

If a man were suddenly exposed to space where there was no sun within several light years, what would happen? Some may say he would freeze solid instantly. There is no reason to believe this. His body is at a temperature of 98.6 degrees Fahrenheit when he is thrown into space. Where is this heat going to leak off to? There is no air around him to absorb it, so his body temperature would probably sink very slowly, as it

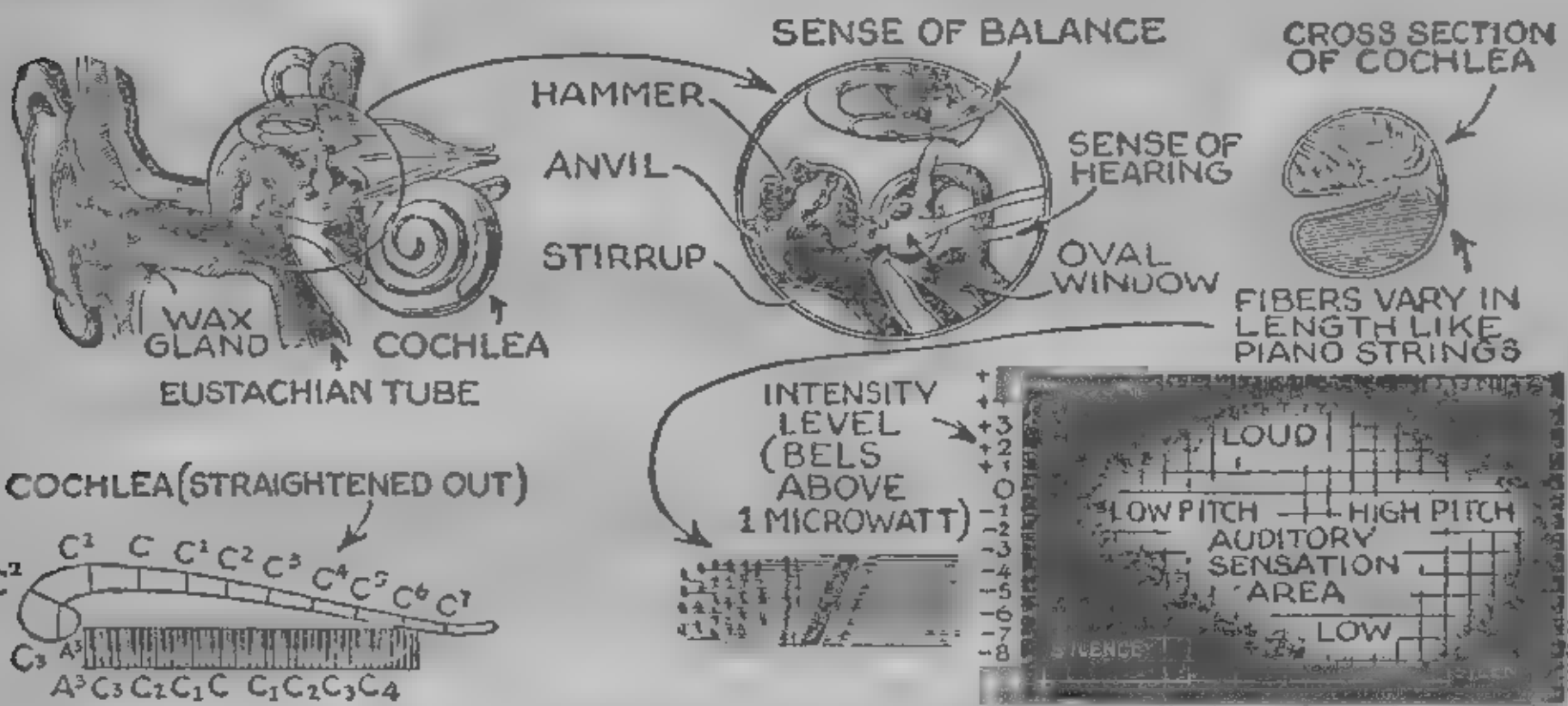
could lose heat only by radiation. As for matter in the form of separate atoms—cosmic dust, between galaxies, Eddington thinks it may have a velocity corresponding to a temperature of 18,000 degrees F.

We cannot force all of our authors to accept these theories, for they are only theories. Perhaps the cosmic rays would have something to do with the effects of exposure in space also, but one man's guess is as good as another's until someone actually carries out a practical experiment. Most authors also picture empty space as an utter blackness, pierced here and there by intensely bright pin-points, the stars. Without the atmosphere of the earth to absorb the light of most of the stars, the universe, to an observer in space, would probably appear white, like day, rather than night—so many more stars could be seen.—EDITOR.)

have a very acute sense of hearing and may be able to hear noises unfamiliar to us.

The nerves of the inner ear can become fatigued, like muscles. After passing a sound, the nerve takes a very small fraction of a second to recover before it can pass the next one. When a person is exposed to a very loud noise for any length of time, perhaps in the open cockpit of a small airplane, he is usually deaf for moments, and sometimes hours, after the noise ceases. The nerves of the ear have been so overworked that they refuse to pass any sound until they recover. Young people have a more acute sense of hearing than old ones; because, after many years, some of the nerves which transmit very high tones wear out, making it impossible to hear the few highest notes on the piano.

On this page we are illustrating the outer, middle, and inner portions of the ear.—EDITOR.)



Above are a few diagrams of the parts of the ear. At the top center we see the location of the fluid that allows us to keep our sense of balance, and the cochlea is shown to the right. At the lower right we see the sounds that are audible to human ears.

How We Hear

Editor, SCIENCE QUESTIONS AND ANSWERS:

Practically everyone makes daily use of his five senses, but I think that very few ever wonder about them, though they are the most remarkable and interesting things about the human body. For instance, I've often wondered just how do we hear? What brings the sound into our minds and allows us to understand it intelligently? I wish you would print something about this in your instructive column.

WILL OTTO,
St. Petersburg, Fla.

(There have been many, many volumes written about the human and animal senses, all of which are intensely interesting and well worth the reading. We will say a few things about the sense of hearing here.

An object which vibrates disturbs the air, causing "ripples" to emanate in all directions. We can detect those between 16 and 20,000 vibrations per second with our ears. This is over ten octaves in the musical scale. The ear is a much simpler organ than the eye, and is connected to the brain by the "auditory" nerve. While this nerve has 3,000 fibers, which are insulated by "myelin," the optic nerve has about fifty million elements! What is commonly called the "ear" is merely the reflector of the waves that travel down the channel to the "drum," which is the diaphragm set into vibration by the disturbance in the air. This vibration passes on to the "hammer," "anvil," and "stirrup," in the middle ear (so named because they are shaped somewhat like those familiar implements). The vibrations then travel into the inner ear, where the auditory nerve conveys the sensation to the brain. The brain interprets it into intelligent ideas. Some people can hear vibrations above or below the normal scale, and we have heard of many cases where people have heard sounds audible to no one else. Dogs, for instance,

Comets and the Solar System

Editor, SCIENCE QUESTIONS AND ANSWERS:

I know you do not mind Britishers writing. I think your book is the *best* of scientific fiction I have read. I wish great support and world-wide fame. It's simply great! Well, now you have had my praise, sir. I will humble myself to a couple of questions which I should be ashamed to ask.

1. How large is a comet?

2. What really is the Solar System?

I would be very thankful to see an answer in your column.

ALBERT MARSH,
London, England.

(We always enjoy hearing from our numerous British readers.

1. A comet is composed of a nucleus and a tail. Their sizes are measured by the diameter of the nuclei, and the lengths of their tails are also computed by astronomers. Their sizes vary. Some are larger than the earth, and some are much smaller—as small as only a few miles in diameter. However, they are thought to be composed of rare gases having very little, if any, solid matter. Their tails are composed of gases also. Some scientists believe that a small bit of solid matter exists in the center of the nuclei of the largest. Halley's Comet, discovered in 1680, returns to blaze past the earth about once in every 76 years; it was last seen in 1910. It is an awe-inspiring spectacle that comes but once in a lifetime.

2. The Solar System consists of everything held by the gravitational force of our sun, Sol, and is billions of miles in diameter—EDITOR.)

The SCIENCE FICTION LEAGUE

—a department conducted for members of the international SCIENCE FICTION LEAGUE in the interest of science-fiction and its promotion. We urge members to contribute any item of interest that they believe will be of value to the organization.

EXECUTIVE DIRECTORS:

FORREST J. ACKERMAN
EANDO BINDER
JACK DARROW
EDMOND HAMILTON
DAVID H. KELLER, M. D.
P. SCHUYLER MILLER
CLARK ASHTON SMITH
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Executive Secretary
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Assistant Secretary

THE SCIENCE FICTION LEAGUE has gained tremendous popularity and publicity in the short time it has been in existence—or rather, in organizing, for it has by no means really started to exist yet as the powerful institution that it is bound to develop into as the years go by. We are confident, and want you to be, that the LEAGUE is no "flash in the pan," but like the advance of civilization, it will expand and grow and eventually envelop the entire world with members in all corners of the globe—members by the thousands and chapters by the hundreds. Why should we be so sure of ourselves?—because we have already had a taste of the enthusiasm and the determinate co-operation of the scant several hundred members that the LEAGUE has to date. Why not join now while we are yet little more than a name instead of waiting until THE SCIENCE FICTION LEAGUE is among the leading fraternities on earth? There is more glory in being a veteran member.

Some people know of the existence of science-fiction but do not believe that it is any better than other types. It will be the duty of members of the LEAGUE to show these uninformed potentials the superior points of the literature. Others devour the books of Verne, Wells, and Poe and all the science-fiction movies avidly without knowing that it is science-fiction and being in ignorance of the fact that monthly sources of their favorite literature exist. That makes three types of potential fans we have seen already:

1. Those who do not know the superior qualities of science-fiction.

2. Those who have never heard of it (the great majority of potentials).

3. Those who have an unconscious longing for it.

The SCIENCE FICTION LEAGUE is not "just another club" but something to be carried forward by future generations—by our descendants who will give 1934 a special distinction, as being the year in which the LEAGUE was formed—a date to go down in history.

THE SCIENCE FICTION SWAP COLUMN

No doubt you have already noticed the new SCIENCE FICTION SWAP COLUMN, the first edition of which appeared in our July number. This is one of our first moves in the SCIENCE FICTION LEAGUE. It is an opportunity for members (as well as other fans) to secure valuable additions to their collections at very reasonable costs, either by placing an insertion in the "Wanted" department, or taking advantage of the offers in the "For Sale" section. Most rabid science-fiction fans are most enthusiastic over keeping a collection and will find this column of interest. They find it a rare thrill when they glance upon some old science-fiction magazine or classic for the first time—something they have long been searching for. Most everybody likes to collect something and the science-fiction fan naturally falls into collecting his favorite literature. Not only is there the satisfaction of having a large collection, but the materials composing it are of an educational and entertaining nature—they offer endless hours of diversion—something that stamp and coin collectors cannot boast of. The advertising department has made the cost of advertising in the SCIENCE FICTION SWAP COLUMN ridiculously low, so that members of the SCIENCE FICTION LEAGUE can make use of it for "practically nothing."

"PEP" EDITORIALS

In last month's issue of WONDER STORIES, we placed an editorial filler taking an entire page, really an editorial "pep" talk. We intend to use something of this nature every once in a while, chiefly to acquaint new fans with science-fiction in a short while, by familiarizing them with science-fiction and the SCIENCE FICTION LEAGUE. Sometimes it is years before the fan realizes the power and value of science-fiction, and we hope that these editorials will shorten that period. We invite members of the LEAGUE to offer suggestions to use in these editorials. We have often found that our readers have valuable ideas that aid us greatly, and we do not want you to make a secret of them. We might say that "100,000 heads are better than one."

HOW TO FORM A CHAPTER

We have already received many inquiries from members concerning the proposed chapters of the LEAGUE. We have been withholding the formation of these branches in order to have as many members of the LEAGUE as possible to join them—the more members we have, the more chapters there will be and the more members *they* will have. Several ambitious members have offered to start chapters. If you want to be one of them, send in your name to us. In the following issue after we receive your name, we will publish it with your address. All members of the LEAGUE in the immediate district who would like to join the local chapter (and we hope all of them will) will write direct to the member who wishes to form the chapter—the "Director" as he will be called. After the chapter is well under way, a new Director may be elected, if necessary. When the Director of the proposed chapter has several names on his list (he should wait for at least three weeks after the magazine appears on the stand in which his name appears) he will send the list to the Assistant Secretary at Headquarters in New York. The list will then be o.k.'d and a certificate issued announcing and declaring the existence of the chapter.

If you wish to form a chapter, write to us and say, "I would like to be the Director of a Chapter of the LEAGUE consisting of members in and around Blank, State. Please publish my name in your next issue." And then sign your name. When you, as Director, have received letters from members in your district, for at least three weeks, applying for entrance into your chapter, send the list to us, stating as follows: "John Dow, Director of Blank SCIENCE FICTION LEAGUE; members who wish to join chapter—" and then list them. We will give your chapter an official name and number. From then on, the name and ad-

dress of your chapter will be printed in every issue of WONDER STORIES, so that those who become members of the SCIENCE FICTION LEAGUE from time to time, who live in your neighborhood, may join, increasing the size of the chapter. Dues or fees of any kind *may* be charged within local chapters, in order to carry on special activities, only upon the agreement of all the members. Those members who do not wish to contribute, will not be expelled from either the chapter or the LEAGUE by not doing so. In other words, all contributions must be voluntary, though a specific amount may be decided upon. This will be done only within local chapters—there will be no dues or fees of any kind conducted by the LEAGUE Headquarters. Treasuries accumulated by this method may be used to issue pamphlets, hire halls or lecture rooms, or any other reasonable thing that the Director and local members see fit to use it for. This also includes outings, parties, etc. The Director or his appointee will be the presiding officer at each meeting. Assistant Director, Secretary, and Treasurer may also be elected by the local members. However, accurate minutes must be kept, a duplicate of which will be sent to Headquarters within one week after the close of each meeting. Important activities recorded in the minutes will be discussed in this department, which will be the voice of the LEAGUE and all its chapters. Meetings may be held at any frequency, everything to be decided by the local members. All helpful suggestions made by members during any meeting will, of course, be recorded in the minutes and therefore prove of value to other chapters. There is to be no competition between chapters—they are to co-operate, and perhaps, after a while, we will have a grand convention somewhere with delegates from the various chapters. Would you like to be a Director of a local chapter of the LEAGUE? There will be very little responsibility on your part, and it is not hard to find a meeting place. If you can't start right off with a lecture room or hall, or one of the members' homes, then you can meet in the nearest public park until the chapter is larger and can afford something better.

We would like to receive volunteers for Directors in the following cities as soon as possible. Boston, Manhattan, Bronx, Brooklyn, Philadelphia, Detroit, Cleveland, Baltimore, Washington, Chicago, Buffalo, St. Louis, San Francisco, Denver, and Los Angeles in particular—and, of course, any other well-populated area. If we receive more than one volunteer from any particular city or area, we will honor the first. If you have volunteered and your name does not appear in the next issue of WONDER STORIES, but someone else's in that district instead, send your name immediately to him and join his chapter. You will then be the first one considered when a second chapter in the city is needed or a new Director for the one you have joined. We hope to receive many volunteers. This is the best way you can show your enthusiasm for the LEAGUE at the present time. Form a chapter and make it something to be proud of—a credit to the LEAGUE.

ESSENTIALS

There has been some necessary delay in preparing the first essentials of the LEAGUE, for which we ask your pardon, but we are now well stocked up with seals, buttons, certificates, letterheads, and envelopes.

THE OTHER SCIENCE FICTION CLUBS

We print in part a letter from William S. Sykora, Member Number 208 of the SCIENCE FICTION LEAGUE

"It was with great pleasure that I noted the inauguration of the SCIENCE FICTION LEAGUE which is to be sponsored by WONDER STORIES. This was one of the wisest moves that could have been made at this time. Its advantage should be two-fold: In the first place, this LEAGUE should prove a fine circulation builder for "our" mag; and in the second place, it should serve as a strong union of stf fans throughout the world. However, I trust that this will not mean the exclusion of all news of other clubs from the "Reader Speaks" columns. The LEAGUE should serve as a confederation of these clubs rather than a competitor. You will find, I am sure, that members of all or most of the old clubs will eagerly join and look up to the LEAGUE, not as a rival of other stf organizations, but rather as a big brother. In this way, the LEAGUE should become one of the greatest powers for mutual good-will among all true followers of scientifiction. As a real old-timer and a rabid fan (I used to buy Mr. Gernsback's first stf mag way back in '26) I welcome and approve the SCIENCE FICTION LEAGUE as a bond of good faith, joining the minds and hearts of all true-blue fans in an indissoluble union of unselfish good feeling.

"You will undoubtedly find many members of the International Cosmos Science Club following the lead of our secretary, Mr. John B. Michel, and myself, in lining up with the new organization."

We are very pleased to print this good word from Mr. Sykora, a very active fan, and wish to assure him that the SCIENCE FICTION LEAGUE is a competitor of no other organization. We want all other science-fiction clubs to become branches, chapters, of the LEAGUE. Being composed of the most enthusiastic fans, they will undoubtedly agree to this, for they can advance much faster and easier and become greater as a part of the LEAGUE, than they could by themselves. If, for instance, the New York Branch of the International Cosmos Science Club wishes to join the LEAGUE, they will probably be designated as the "New York ICSC SCIENCE FICTION LEAGUE." This ICSC added to the title will show that it is also part of the

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Application for Membership

SCIENCE FICTION LEAGUE

I, THE UNDERSIGNED, herewith desire to apply for membership in the SCIENCE FICTION LEAGUE. I have read the rules of the LEAGUE, and hereby pledge myself to abide by all the rules and regulations of the SCIENCE FICTION LEAGUE. Enclosed find fifteen cents (15c) to cover the mailing and handling charges for this certificate.

Name

Address . . . .

City and State . . . .

Country .

Date . . . . . .

(It is important the reverse of this blank be filled out. No application valid without.)

International Cosmos Science Club. There can still be another New York Chapter of the LEAGUE, without the ICSC or with "Manhattan" instead of "New York" in the title. The names will not be confused, and members of the other organizations will be able to belong to both, though they will be fused into one. All clubs which join the LEAGUE will have this department to discuss their activities, besides any other organ of their own.

When another science-fiction club wishes to become a local chapter of the SFL, each member who has not already joined the LEAGUE must do so, of course, before the chapter is declared. No chapter of the SFL can have members who have not joined the parent body and received a certificate from Headquarters.

It will not cost anything either to form new chapters from disassociated members or other science-fiction clubs, and it will lend prestige to any branch to be known as a chapter of the SCIENCE FICTION LEAGUE as the years go by. It will be much easier to secure new members with the SFL in the title of the club. By joining the LEAGUE, the club, ICSC, or any other reputable one, puts no restrictions on its activities. There can be nothing but profit and benefit in the act.

Of course, as an example, if the New York Branch of the ICSC wishes to become a chapter of the LEAGUE, that does not mean that all other branches of the ICSC will have to join, though, of course, we hope they will. Each branch will join separately, as an individual chapter of the SFL. The entire ICSC, with branches all over, could not join as one chapter. Each chapter must be in a definitely located district, so that local members can easily get in touch with each other and hold meetings.

All members who join a branch of one of the other science-fiction clubs which is a branch of the SFL must, of course, join the LEAGUE also. If they do not want to join the ICSC, for instance, they will find another chapter of the LEAGUE nearby which has no affiliation with the ICSC.

MEMBERS' CORRESPONDENCE

George Gordon Clark, the very first member of the LEAGUE, makes a suggestion in the following letter:

"I am a member of the LEAGUE and am desirous of seeing it progress. I have followed the ideas behind the LEAGUE but I have yet to see any mention of how members are to find who their fellow members are so that they can communicate. Therefore, I offer this suggestion, if it has not already been taken care of.

"Have a list printed of all regular members of the LEAGUE, the same being revised every three months, to be furnished only to regular members at a small nominal cost of, say about five cents to cover the cost of getting it up.

"As this list will be sent only to members of the LEAGUE, you can easily judge the amount needed. It will also serve to keep the ideals of the LEAGUE intact by preventing non-members from gaining these names and addresses and also prevent unscrupulous people from using the same as they must be approved or have their name on the list before they can offer reading material to the members or approach them with something supposed to have the sanction of the LEAGUE.

"It will also help those who wish to become personally acquainted with other members for the purpose of starting clubs in their districts.

"I hope, if this idea has not already been taken care of, the same will meet with your approval."

We thank Member Clark for his kind suggestion. As you will notice, "How to Form a Chapter" is announced in this issue's department, and "Members' Correspondence" was discussed last month.

You will remember that we said it would not be fair to furnish each member with a complete list of all other members, either by publishing it in this department or issuing special pamphlets. This might bring too much correspondence to certain members, some of which will be from those they do not wish to correspond with. This overloading would necessitate the neglecting of many members and become quite a burden to the recipient.

We feel that it is better to let everyone correspond with only those he wants to. Therefore, if you wish to correspond (using your new SCIENCE FICTION LEAGUE stationery, of course), send in your name as follows:

"John Dow, Box 1, New York City, N. Y.—boys between the ages of seventeen and twenty in New York State, interested particularly in interplanetary flight."

This is only an example. You may say anything else you please, but remember when you send in your entry that you will be obligated to answer all mail filling your requirements. Other mail, from persons of other ages or districts, you may neglect without ill-feeling on the part of any member or the parent body.

William S. Sykora, Member Number 208 of the SCIENCE FICTION LEAGUE, would like to exchange correspondence with young men of about 20 (twenty) years of age who are especially interested in time-travel (Locality unlimited). His address is 31-51 41st St., Long Island City, New York.

LEAGUE SUGGESTIONS

Here are a few advance suggestions of how you can help the SCIENCE FICTION LEAGUE:

(1) If you wish to form a local chapter of the LEAGUE, get a newspaper to print a notice in the society or club section. They will do this free of charge and it will aid you in securing many members.

(Continued on page 378)

(REVERSE SIDE)

I consider myself belonging to the following class. (Put X in correct square.)

Professional
(State which, such as doctor, lawyer, etc.) ☐ ....

Business (State what business) ☐ .....

Author ☐ .....

Student ☐ .....

.... ☐ ....

Age..... .....

Remarks:.... . ...

... .

The Reader Speaks

IN this department we shall publish every month your opinions. After all, this is your magazine and it is edited for you. If we fall down on the choice of our stories, or if the editorial board slips up occasionally, it is up to you to voice your opinion. It makes no difference whether your letter is complimentary, critical, or whether it contains a good, old-fashioned brickbat. All are equally welcome. All of your letters, as much as space will allow, will be published here for the benefit of all. Due to the large influx of mail, no communications to this department are answered individually unless 25c in stamps, to cover time and postage, is remitted.

From Scotland

Editor, WONDER STORIES:

Though, it is true, that I have noticed, with your other correspondents, the decline of the mag from October, 1932, to March, 1933, I consider WONDER STORIES an excellent method of opening the reader's eyes to the wonders and possibilities of science and invention. I laugh at all your readers who dare to criticise your policy of changing the size, shape, format, authors, artists, etc. All I can say for these critics is, "Let them put on the Editors' shoes and try carrying out their own programmes!" They remind me of the following anecdote: "Pat says to Mike, 'Wouldn't it be awful, now, if England gave us everything we wanted?' and Mike replies to Pat, 'Just like her to play us that dirty trick!'"

The stories I like best in all the copies I have read are the following:

"The Exiles of the Moon" by N. Schachner and A. L. Zagat
"The Time Stream" by J. Taine
"The Martian Guns" by S. D. Bell
"The Crystal Empire" by S. D. Barlow
"Red April, 1965," "The Radium World," and "The Crisis with Mars" by F. K. Kelly
"The Final War" by C. Spohr
"Mutiny on Mercury" and "The Voice in the Void" by C. D. Simak
"The Master of Storms" by E. K. Sloat
"The Man who Awoke" series and "The Wreck of the Asteroid" by L. Manning
"Spacewrecked on Venus," "Escape from Phobos," and "The Asteroid of Death" by N. R. Jones
"The Revolt of the Scientists" series by N. Schachner
"The Struggle for Pallas" and "The Vanguard to Neptune" by J. M. Walsh
"The Third Vibrator" by J. B. Harris
"Captive of the Crater" by D. D. Sharp
"The Isotope Men" by F. Pragnell.
"The Lunar Consul" by S. Patzer
"The Revolt of the Star Men" by R. Gallun

I have not read E. Thebault's "The Radio Terror" as its Part Three is in the missing September-October, 1933, number, nor have I read "Exile of the Skies," as its Part Three, again, is in the March, 1934, number, which has not yet come to my hand. It is my habit, and preference, to keep serials by me till I get the last instalment, then I read them through without having to read each part at intervals of a month each, not easy to recall what I have read four or five weeks before! I do not mind what artist you choose for the illustrations, so long as the portrayal of men, buildings, machinery, and nature is accurate. I must say, however, that Paul is my favorite artist. In the illustration for C. B. Kruse's "The Heat Destroyers" Sauty's effort made me feel as if I had just taken some quinine!

Will there be any possibility of stories of the lost continents of Atlantis and Lemuria, stories of peoples of those countries armed with deadly weapons and so forth, similar to J. B. Harris' "The Third Vibrator"? When is F. K. Kelly going to write another good war-story with rocket-driven gravity-cruisers, sapphire heat-rays and cathode-beams, as in his "Red April 1965"? Where is the promised sequel to C. Spohr's "The Final War"?

I am sure that the depression will be over sufficiently for you to continue in supplying the high standard of your mag. But there, I am afraid I have written quite a long letter, but I have not written to your "The Reader Speaks" columns till now.

All the best of fortune to your mag!

W. N. WARRINGTON,
Bearsden, Scotland.

(Our over-seas readers always write interesting letters and we can never print too many of them. Your list of favorite stories include some of the very best we have published. You ask for stories about Atlantis and Mu. We receive many about them every week, but, for the most part, they contain the same old stuff hashed over. We only accept those that are decidedly unique and different from all others. Witness "Voice of Atlantis" by Laurence Manning in our July number.

We have become very strict lately with our authors, and accept only stories with original plots propounding new scientific theories, for the most part, and as a result you see the constant improvement in the magazine.—EDITOR.)

The May Number

Editor, WONDER STORIES:

A word about the May issue.

The cover: excellent. I wish, however, that you would remove the strip, "Best in Science Fiction" as it serves absolutely no purpose at all, as far as I can see. In the small size, it takes up too much valuable space. I hope that you will not have the S. F. LEAGUE seal on the cover every month as there are enough seals already.

The stories: super-excellent, with "Green Cloud of Space," and "Earthspot" tying for first place. "Kandulu" was a true masterpiece, a worthy successor to "The Exile of the Skies," although not quite as good as its predecessor. "The Tone Machine" and "Traders in Treasures" were both fine, the former especially good for its thrilling action. However, I think that the short story is being overdone. There should be more and longer novelettes such as "The Land of Mighty Insects." I expect "Into the Infinitesimal" to be exceptionally good. Don't disappoint me.

I am somewhat sorry to hear that the proposed Annual will feature only stories from the old WONDERS as that means that I have probably read them. I would like to see stories such as "The Rebel Soul," "The Mouthpiece of Zitu," "The Messiah of the Cylinder," and "The Squadron of the Air" reprinted. However, if you must take them from the old WONDERS, please take Dr Keller's "The Human Termites." I started to read SCIENCE WONDER with the Dec., 1929, issue and that story ended in the preceding issue. I would like to read it, since it was praised so many times.

The S. F. LEAGUE has been needed for a long time. I have already sent my application for membership and am anxiously awaiting my pin, etc.

When do we again hear of the Stranger's Club? Laurence Manning is by far your best writer. Hurry up more yarns by this talented young man before I get violent!

Also do we ever again hear from the charming Gawain Edwards? And more stories from John Beynon Harris, Otfrid von Hanstein, Stanton A. Coblentz, Dr. Keller, R. Vaughan, Edward Hinton, Eando Binder, John Scott Campbell, and Raymond Gallun. In fact, all of your authors are excellent.

I'll sign off now, and give somebody else a chance to voice their approval (?).

ALVIN H. LYERSON.
Hollis, N. Y.

(We intended to place the SCIENCE FICTION LEAGUE seal on the cover each month, but have found that there is usually no room for it. It is very difficult

to reprint the old science-fiction classics, and impossible to secure most of them, for the copyright owners will not give permission to have them reprinted in magazine form. If you want these stories for your collection, watch the SCIENCE FICTION SWAP COLUMN, where science-fiction dealers advertise. We intend to use Dr. Keller's "Human Termites" story in the annual.

You are one of the very first members of the SCIENCE FICTION LEAGUE. Number 33.

The Stranger Club stories are being continued from time to time, the latest of which was "Voice of Atlantis" in the July issue. Manning is one of our staff writers and we are going to try to get one of his stories for each issue. Gawain Edwards is no longer writing science-fiction. Most of the other authors you mention are regular contributors to our magazine and we have several of their stories on hand.—EDITOR.)

"That Genius, Paul"

Editor, WONDER STORIES:

The June cover was marvelous! Super-excellent. I just can't understand why some people fail to admire and appreciate the work of that genius, Paul. I know of no one who can match his drawings. Absolutely nobody!

The editorial was very good.

Then I read "Into the Infinitesimal" by Kaye Raymond. First of all, I must congratulate the author of this great story. It was packed with adventure, mystery, thrills, and what-not. But the science could stand some correcting.

The author did not explain the reducing process minutely, but as I understood it, the principle characters re-arranged the particles in their bodies and in the machine. Now the only obvious way to make an object smaller in that manner, is to place the particles closer together, so that the space between them is greatly reduced. So far all right.

However, if there was absolutely no space at all between the particles of their bodies, they would still be much bigger than an electron. They would be as many times bigger than an electron as there were particles in their bodies!

To make this more clear, I will illustrate. Let us imagine that the entire Milky Way was contracted so that there would be no space between any of the suns and planets. This would, of course, contract it enormously. But the final result of the contraction would not be able to land on a sun, for the simple reason that it would be innumerable suns huge! I hope I have made this clear.

In continuation, if it were possible for the characters to land on an electron, they would demolish it, because the matter of their bodies would be like neutronium. Countless difficulties are involved.

However, except for some of the science, the story was great

"The Doorbell" was a great narrative. Keller is a master of the pen (or should I say typewriter?) I half expected to find Taine of San Francisco on the job again.

As for "Cosmic Calamity," it certainly did the unexpected. The ending was very unusual. More shorts, please.

"Adrift in the Void" was O.K. Good interplanetary yarn.

Am waiting for the conclusion of "Druso."

RAYMOND PEEL MARIELLA,
Philadelphia, Pa.

(Your arguments against the science in "Into the Infinitesimal" are very logical. We had a hard time deciding whether we should accept the story or not. The story itself, as you say, was excellent, but the science was questionable. However, we decided that we should not deny our readers such a good story because of a little scientific weakness. We try, and succeed most of the time, in keeping only accurate and plausible science in our stories. We will have to suppose that the characters in "Into the Infinitesimal" had some method of decreasing the size and weight of the atoms in their bodies when they travelled into the atomic universe. Though Taine of San Francisco did not appear in "The Doorbell," you will see him once again in Dr. Keller's next story, "The Tree of Evil."—EDITOR.)

"The Shakespeare of Science Fiction"

Editor, WONDER STORIES:

The cover of the March WONDER STORIES is up to Paul's standard, clearly depicting the scene. The editorial was very interesting, containing many instructive facts.

As for "The Brain-Eaters of Pluto," if variety is the spice of life that was pepper in my eye albeit pleasant pepper, of the genus that evokes cachinnation irregardless of the peruser's estimation. Give us more like it.

"Children of the Ray" further verified my assumption that Mr. Haggard is, in frank colloquial language, a "swell" author.

"Martian Madness" was certainly worth the time of reading. It left me in deep thought.

Mr. Manning scored another hit in "Caverns of Horror." It contained a plausible and interesting plot, and was very well written. Let's hear more from the Stranger Club.

And after all my waiting comes the long expected Kelleryarn. It was well worth the waiting. Keller is the Shakespeare of science-fiction. I would certainly like to get some of the gland secretions, or should I try the corkscrew? I wonder how Keller would settle this problem of a struggling author.

"The Exile of the Skies" not only filled my expectations, but overflowed them. Such stories are rare nowadays, and one sprinkled here and there is a blessing. Tell Mr. Vaughan to continue his excellent work.

The poems and the various bits of information were interesting, as was "The Reader Speaks."

The April issue also started off great with the superb cover and the announcement. Chalk up this avid scientifictionist as a member. I'm for it and all that goes with it. The SCIENCE FICTION LEAGUE will surely increase the readers of Stf.

Then I read "The Land of Mighty Insects." Except for the now hackneyed plot of warm lands at the poles, it was a great story, exceedingly well written, and held me, eyes glued to the pages, till the heart-rending termination. Hurry with that sequel!

"The Moon Devils" was a good story, though some of my friends didn't like the title. Mr. Harris is becoming a regular dyed-in-the-wool author.

"The Menace from Space" contained nearly the most amazing plot I've ever read. It was an excellent story, extremely thought-provocative. A sequel here is also required.

"The End of the Universe" was short and sweet. Always print at least one short story in the issue.

"The Last Planet" was O.K. Starzl still retains that good old style of his.

After thinking it over, I admit Winter's illustrations are very good, especially the one for "The Last Planet." I realize that variety is needed. You win.

Hurry up with the conclusion of "Xandulu" and the Kelleryarn, "The Doorbell."

Yours very supercallifedulisticespiallidosciously. (Is that so?)

RAYMOND PEEL MARIELLA,
Philadelphia, Pa.

(According to Laurence Manning, you will hear more from the Stranger Club. We do not advise you to take Dr Keller's advice about exciting pain in order to write like a genius. Remember what happened to "The Man With the Longitudinal Head," in "The Reader Speaks" of our May issue.

We are glad to see that you at last see the merit in Winter's work. Our readers have praised him very highly.

Suppose you send us a definition of that fifteen syllable word in your last paragraph? We can't find it in our dictionary.—EDITOR.)

The Two New Departments

Editor, WONDER STORIES:

I have been a reader of SCIENCE AND MECHANICS and WONDER STORIES ever since I was introduced to them over two years ago and have always found them excellent magazines for the serious scientific investigator.

"The Reader Speaks" and "Science Questions and Answers" have a very great attraction for me and I would buy WONDER STORIES just to have these pages alone—even if I had no faith in Stf.—which heaven forbid! But, as a member of the British Interplanetary Society—and a striving author—I find great thought and theories being pulled out from the dark shelves of my brain to explain the phenomena that we meet with in the pages of W.S.

GEORGE A. DAY,
Middlesex, England.

(We have been convinced that the two departments you mention, "The Reader Speaks" and "Science Questions and Answers" form an essential part of the magazine, and it would be a great loss to omit them. But now we have added two new departments —The SCIENCE FICTION LEAGUE and "The Science Fiction Swap Column." These latter two have been instituted in order to spread the gospel of science-fiction and help fans secure the books and magazines that they have long hunted for without success.—EDITOR.)

An Author Speaks

Editor, WONDER STORIES:

Let me congratulate you and WONDER STORIES on the March issue. It was splendid all the way through, and all the stories were exceptionally good—in particular "Martian Madness" by Cleator and "Exile of the Skies" by Vaughan. Of the former, let me say that seldom have I read a story more interesting and nicely written. Of the latter, there are not enough adjectives of praise to fully eulogize it. Your prediction (at the beginning of the first instalment) that it would be a classic is proved, to my mind. Certainly Mr. Vaughan is to be congratulated on that fine tale. I think it is obvious that WONDER STORIES is forging ahead rapidly under the new policy.

EANDO BINDER,
Chicago, Ill.

(Eando Binder has now become one of the leading authors in science-fiction. Watch for his stories, "The Robot Aliens," "Dawn to Dusk," "Thieves From Isot," and several others we have on hand. Readers are noticing that each of his stories is better than the one previous. We would not be surprised if he is acclaimed the favorite of our readers for the year 1934.—EDITOR.)

A Classification

Editor, WONDER STORIES:

I just finished reading the March, 1934 issue of WONDER STORIES and have classed the following according to my opinion:

1. Editorial—Always the best.
2. "Children of the Ray" by J. Harvey Haggard. Very good.
3. "Xandulu" by Jack Williamson. Another good Williamson story.
4. "Exile of the Skies" by Richard Vaughan. An excellent serial.
5. "The Brain-Eaters of Pluto" by Kenneth Sterling. Fine; we need a good laugh.
6. "Caverns of Horror" by Laurence Manning. More!
7. "The Literary Corkscrew" by David H. Keller. A new plot for once.
8. "Martian Madness" by P. E. Cleator. Should have been longer.

Let's have more of Clark Ashton Smith's stories.

BEN WARNER,
Kansas City, Mo.

(We are always pleased to receive the classification of the stories in our magazine by readers, and we print as many as we find space for.—EDITOR.)

Unbounded Enthusiasm

Editor, WONDER STORIES:

WONDER STORIES really is the best science-fiction magazine printed; it has always been the best science-fiction magazine printed. You don't hold the authors back: they can write a story as "fantastic" as they wish. You allow for imagination, and that is what brings out those things that are the spirit of a science story—theories, ideas, food for thought. Your authors' have free rein; also, they must be stimulated by the wonderful pictures drawn by Paul. I can easily see that WONDER STORIES is not striving for popularity among everyone as some "science-fiction" magazines are doing. Continue, Our Good Editor, continue.

I prefer stories which are supported by the weird effect which Paul puts forth in his pictures: stories which contain good science, new ideas, and are written with gusto and spirit (that's a perfect story).

"The Spore Doom," "The Last Planet," "Evolution Satellite," and "Caverns of Horror" (Manning's very good—more from him) are the best stories I've read in a long time. "Monsters of Callisto" can't be ignored: I'll never forget it. I haven't read "Xandulu" yet, but I will enjoy it after I have all the instalments. "Moon Plague" hit me below the belt—that was a dirty blow.

Winter has a clean style, but I like Paul better. However, the two excellent artists must satisfy every reader.

The SCIENCE FICTION LEAGUE is a wonderful thought. We'll join; we'll support.

Please don't continue a story to the back of the magazine—it's a hindrance when a reader wishes to save a serial or short stories.

I hope people will soon realize what a valuable literature science-fiction really is.

STUART AYERS,
Lewiston, Idaho.

(Your enthusiasm seems unbounded; we are proud that we have such loyal readers as enthusiastic supporters of WONDER STORIES. It is your type that will make the SCIENCE FICTION LEAGUE the biggest forward step that fantasy has taken in many years. We know that you will be one of our very first members.—EDITOR.)

Good Wishes for the SFL

Editor, WONDER STORIES:

I've just read about the SCIENCE FICTION LEAGUE and although as yet, I do not know the characters and by-laws of the LEAGUE, I am sure that it will be a great organization to promote science-fiction to greater heights.

ROBERT JOSEPH BINDER, I, II, and III,
Milwaukee, Wis.

P. S. Milwaukee is where all that good beer comes from and incidentally, I'm a great Beer Baron.

(We print this letter as an example of countless others we receive stating the same thing in other words, except for the reference to the Milwaukee beer —EDITOR.)

Veto On Fighting Spacemen

Editor, WONDER STORIES:

This is another letter written by one of your beloved cranks. Vide Page 1053.

A story by John Edwards caused me to dig my thinking box out of the snowdrift and set it a-going. Here is the result: Mr. Edwards' story is one of the two or three printed during the life of your publications which treat the character of an advanced civilization in a logical manner. Viz., that a civilization far enough advanced to have mastered the deeper secrets of nature and tapped its mightier powers has to be benevolent and co-operative to the exclusion of all combativeness, greed, and lust of power. Else it will use its powers to destroy itself utterly.

Take any advance in science foreshadowed by our present knowledge, control of gravity, atomic power, concentrated vibrations of a deadly nature, more destructive chemicals, ditto germs or disruption of atomic structure. Any and all of them would be promptly used for the satisfaction of some national grudge and revenge and for the enslavement of some unfortunate part of humanity, setting up new tensions and grudges, looking for new weapons to reverse the process. This would go on until all humanity was blasted off this planet, if the planet itself were not blown to smithereens by the losing faction in a grand suicidal geste. In fact, Tibetan *Lamas* claim that this is what happened to the missing planet.

So it stands to reason that any humanity far enough advanced to attempt successful space-travel has to be absolutely peaceful and that all the stories depicting visitors from space as child-eating ogres are off the mark and belong in the shocker class. And, looking at your board of associate editors, WONDER STORIES is not supposed to belong to that rowdy class.

Now a few pictorial errors. Page 991: The plug is too small to get the sheet out and the cylinder too short to contain same. Page 968: The story says "covers," not bars. Page 980: perfect. The stories themselves are above the average.

FREDERICK G. HEER,
Sayville, N. Y.

(It has always been our belief that Man cannot be completely civilized until war is absolutely abolished in every form, shape, and manner. War is caused by the lust for blood—a quality that should belong only to animals. However, there is no reason to believe that space-travel could not be perfected by creatures who are warlike.

Your last sentence satisfies us very much. After all, the stories themselves are first to be considered.—EDITOR.)

Reprints Again

Editor, WONDER STORIES:

Having just finished reading the April, '34, issue of WONDER STORIES, it is with that I lay the mag down. "The Last Planet" by Starzl was the best in the issue, though "Xandulu" was a close second. The improvement in the last few issues has been noticeable.

I have been a science-fiction reader since 1927 when I first became acquainted with your publications of that period.

Mr. Editor, I would like to place the following proposition before you and the readers of W.S.—i.e., the publishing as books of the better long serials that have appeared in W.S. in the past. I would joyfully hail the appearance of "The Human Termites," "The Conquerors," and "The Evening Star," by D. H. Keller, M.D., which I believe have never been published in book form. Later the more recent stories as "The Exile of the Skies," "The Revolt of the Scientists" series, "The Man Who Awoke" series, and others I can not recall now. Please let the other readers comment on this.

I hope the present trend of improvement carries on.

FLOYD R. NEAL,
Hiko, Nev.

(We are not as yet prepared to reprint our old stories in book form, though the suggestion is a good one. However, the best stories that we have published during the past five years may soon be used in a WONDER STORIES REPRINT ANNUAL. Publication date of this magazine has not yet been decided.—EDITOR.)

He Withdraws His Objection

Editor, WONDER STORIES:

Since most of the readers are either impassive or in favor of that "Sacred Cut," I, as main objector, withdraw my objection and take my beating without a murmur (although my personal opinion is unchanged).

Your inauguration of the SCIENCE FICTION LEAGUE makes me want to forget all the "brickbats" I have and substitute instead one huge wave of applause. You will find my application blank enclosed.

Leading stories lately have been "Lunar Consul," "Call of the Mech-Men," "Evolution Satellite," "Molemen of Mercury," "Moon Plague," "Man from Ariel," "Literary Corkscrew," "Martian Madness," "Moon Devils," and "Earthspot." "Earthspot" is one of the best, if not the best, of the stories which I have been pleased to read. "Moon Devils" portrays the most likely form of human life on the moon.

A word on illustrations, ere I close. The cover is without doubt the most important illustration, and one of the main factors which influences one to like or dislike the magazine. The subject of the picture, too, is of great importance. Realistic ones such as the "Moon Plague" cover and "Moon Devils" cover (seems as though I'm moonstruck, maybe, but have good intentions) are to my mind the best. Colors should be scientifically correct and not too gaudy and contrasting. Paul is best, with Winter and his fine figure-work runner up. All others have been tried enough and should be discarded. Schneeman's "Into the Infinitesimal" illustration is poor—looks as though he drew it while running for a streetcar. The June cover should have been taken from "Adrift in the Void" instead of "Into the Infinitesimal."

I find that you average five interior illustrations per issue. Why not add several half-page (or even quarter-page) illustrations to the long stories? Short stories like "Cosmic Calamity" should have half-page cuts at least, as did "A Shot from the Sky."

As long as the artistic standard keeps pace with the literary standard, your mag will never degenerate into the class of your competitor, which I read only to make WONDER STORIES "taste" all the better.

Bring on the Annual—use good paper—same size volume—plenty of illustrations by Paul and Winter—stories by popular authors, and it'll sell like hot cakes! May your circulation increase 1000-fold!

PAUL J. SYKES,
Vancouver, Canada.

(As you have seen, most of our readers are in favor of keeping the decoration on the contents page, as a symbol of science-fiction. Thank you for joining the SCIENCE FICTION LEAGUE. You are member number 266. We appreciate your helpful suggestions.—EDITOR.)

Our Cover Scenes

Editor, WONDER STORIES:

I'm afraid that I just had to write you a letter to tell you of my great liking for your now ascending magazine. In my estimation, it is now ranking as one of the highest science-fiction magazines.

But to the stories. Of late, at the head is "Exile of the Skies." New, somehow different, and exceptionally well-written. Next, not one story, but all of J. Harvey Haggard's mark him as one of the greatest authors of unusual and marvelously written stories. His plots are original, his characters belong in the future which they are portrayed in; they fit! Don't lose him, because if you do, I'll wager that a mighty storm of resentment will batter ye editor!

"The Reader Speaks" via the advertisements. Why can't you put the pictures of sex and money-making ideas at the back or front? I see my old friend Bob Tucker points this out. That's not the only thing I agree with him on, and you've probably guessed it—the covers. As far as artistic ability is concerned, W. S. has the best, but as to the scenes chosen for it, they are the worst. Now you say, "We are different." I agree, but as long as Paul is illustrating your covers, you have the best artist of all, so pick out scenes of scientific apparatus instead of "bugs." For a good example, take the April (1934) issue. The cover depicts the battle between the Moon Devils and the Earth-men. Why didn't you use the illustration for "The Menace from Space" by Edwards; which, by the way, is the best story in that number, and should have a sequel.

THOS. R. DANIEL,
Claremont, Calif.

(According to our advertising rules, the ads must be interspersed with the columns of readers' letters. We try our best to get suitable scenes for the covers each month, but it is a difficult task to always find something that will catch the eye of the newsstand scanner.—EDITOR.)

Our "Individuality"

Editor, WONDER STORIES:

Before turning off the power and hitting the hay, let me give you some of my opinions concerning your periodical.

Since this is my first letter, I shall be a little soft on the sledge-hammers and rolling-pins. On the contrary, I want to compliment you on the great improvement your magazine has made. I not only receive hours of enjoyment and pleasure but many interesting scientific facts.

The sole thing which I really do like about your stories is that they never seem to be thrown around from one place to the other. They have INDIVIDUALITY.

Since you changed to the smaller size, there stand out six stories which I enjoyed to the utmost:

Spore Doom.
Vengeance of a Scientist.
Literary Corkscrew.
Green Cloud of Space (by Eando Binder)—This story was a gem
Into the Infinitesimal.
The Land of Mighty Insects.

The part in the story (Land of Mighty Insects) which amused me very much was where the girl learns the methods of romance from one of Shakespeare's illustrated plays and causes the whole thing to end up in a mess. I suppose the author put this character into the story only to liven things up a bit.

As to my favorite authors, there is only one STANTON A. COBLENTZ. I like the humorous veins which he runs through his stories and which he never neglects to include.

That short story which you printed, "Brain-Eaters of Pluto," wasn't so bad but it would have been better if it would have had a little more satirical humor. So here's hoping for more humor in your stories.

By the way, while on the subject of humor, an incident impresses my mind clearly. I was informed by one who had travelled through Persia, that as he passed over a great tract of land and inquired what the name of the place was, they told him it was the Queen's Veil, to which he adds that another wide field lay by it was called the Queen's Girdle—moreover that in the same manner there was a large portion of ground set aside for every part of her majesty's dress. (To READERS: If you are disgusted so far, go on to the next letter.)

(Continued on page 378)

Good News for Members of the
SCIENCE FICTION LEAGUE

THE following list of essentials has been prepared for members of the SCIENCE FICTION LEAGUE by the officers at Headquarters

A FEW WORDS AS TO THE PURPOSE OF THE LEAGUE

The SCIENCE FICTION LEAGUE was founded in February 1934 The Executive Directors are as follow

Forrest J. Ackerman, Eando Binder, Jack Darrow, Edmond Hamilton, David H. Keller, M.D., F. Sawyer Miller, Clark Ashton Smith and R. F. Starzl Hugo Gernsback Executive Secretary, Charles D. Hornig, Assistant Secretary.

The SCIENCE FICTION LEAGUE is a membership organization for the promotion of science fiction There are no dues, no fees, no initiations, in connection with the LEAGUE No one makes any money from it no one derives any salary The only income which the LEAGUE has is from its membership essentials. A pamphlet setting forth the LEAGUE'S policies and purposes will be sent to anyone on receipt of a 3c stamp to cover postage

One of the purposes of the SCIENCE FICTION LEAGUE is to increase the popularity of science fiction, to increase the number of its loyal followers by enrolling personal adherents to the cause To this end the SCIENCE FICTION LEAGUE supplies members with membership letterheads, envelopes lapel buttons and other essentials As soon as you are enrolled as a member, a beautiful certificate with the LEAGUE'S seal will be sent to you, provided 15c in stamps or coin is sent for mailing and handling charges. However, this will be given free to all those enrolled members who find it possible to call personally at Headquarters for it.

Another consideration which greatly benefits members is that they are entitled to preferential discounts who buy science fiction books from numerous firms who have agreed to allow lower prices to all SCIENCE FICTION LEAGUE members The book publishers know that the more fervid fans there are to boost science fiction, the more business will result therefrom; and a goodly portion of the publishing business is willing, for this reason, to assist SCIENCE FICTION LEAGUE members in enlarging their science fiction collections by securing the latest books of this type at discounted prices.

SCIENCE FICTION ESSENTIALS LISTED HERE SOLD ONLY TO SCIENCE FICTION LEAGUE MEMBERS

All the essentials listed on this page are never sold to outsiders. They cannot be bought by anyone unless he is already enrolled as one of the members of the SCIENCE FICTION LEAGUE or signs the blank on this page (which automatically enrolls him as a member, always provided that he is a science fiction enthusiast)

If, therefore, you order any of the science fiction essentials without filling out the blank, or a facsimile (unless you are already enrolled as a LEAGUE member), your money will be returned to you.

Inasmuch as the LEAGUE is international, it makes no difference whether you are a citizen of the United States or any other country. The LEAGUE is open to all.

LEAGUE LETTERHEADS

A beautiful letterhead has been especially designed for members correspondence It is the official letterhead for all members of the LEAGUE and is available when it becomes necessary to correspond with other members or with Headquarters

A—SCIENCE FICTION LEAGUE letterheads, per 100. . . . . Prepaid 50c

LEAGUE ENVELOPES

So that letters mailed to members of the LEAGUE can be immediately recognized, special envelopes that harmonize with the letterheads have been printed

B—SCIENCE FICTION LEAGUE envelopes, per 100 . . . . . Prepaid 50c

LEAGUE SEALS

These seals, or stickers are printed in three colors and measure 1¾" in diameter, and are gummed on one side. They are used by members to affix to stationery letterheads, envelopes, postal cards and the like The use signify that you are a member of the SCIENCE FICTION LEAGUE Seals in lots of 25 or multiples thereof

C—SCIENCE FICTION LEAGUE seals, per 25. . . . . Prepaid 15c

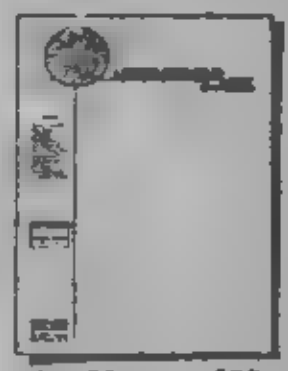
LEAGUE LAPEL BUTTON

This beautiful button is made in hard enamel in four colors red white, blue and gold It measures ⅞" in diameter By wearing this button, other members will recognize you Many friends will perhaps also want to join the LEAGUE. The button must be seen to be appreciated

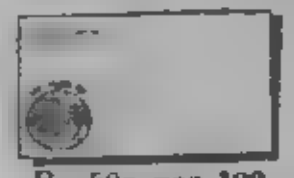
D—SCIENCE FICTION LEAGUE lapel button . . . . . Prepaid 35c

DD—SCIENCE FICTION LEAGUE lapel button, like the one described above, but in solid gold.....Prepaid $2.50

If you do not wish to mutilate this magazine, any number of applications will be supplied upon request.



A 50c per 100



B—50c per 100

C—15c for 25

D—35c each

SCIENCE FICTION LEAGUE, 99 Hudson Street, New York, N.Y.

Application for Membership
SCIENCE FICTION LEAGUE

SCIENCE FICTION LEAGUE, 99 Hudson Street, New York, N. Y.

I the undersigned, herewith desire to apply for membership in the SCIENCE FICTION LEAGUE In joining the LEAGUE I understand that I am not assessed for membership and that there are no dues and no fees of any kind I pledge myself to abide by all the rules and regulations of the SCIENCE FICTION LEAGUE, which rules you are to send me on receipt of this application.

I belong to the following class (put an X in correct space). ( ) Professional; ( ) Business; ( ) Student. ( ) ..... (Please print information)

Name ..... Age.....

Address .....

City and State... .....

Country..... Date .....

I enclose 15c, for postage and handling, for my Membership Certificate.

SCIENCE FICTION LEAGUE, 99 Hudson Street, New York, N Y.
Gentlemen:

[ ] I am already enrolled in the SCIENCE FICTION LEAGUE.
[ ] I am a new member and attach my application to this coupon.

Please send me the following SCIENCE FICTION LEAGUE essentials listed in this advertisement (Please print information)

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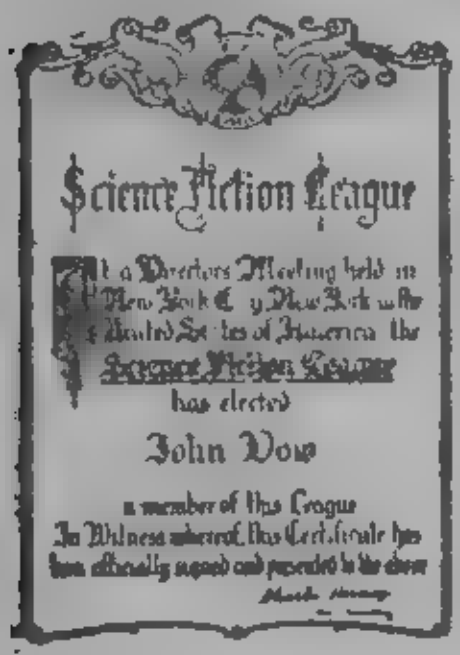
for which I enclose $. herewith.

(The LEAGUE accepts money orders, cash or new U. S. stamps in any denomination. Register cash or stamps.)

Name.....

Address.....

City ..... State..... WS 834


Science Fiction League
At a Directors Meeting held in New York City New York on the United States of America the
Science Fiction League
has elected
John Doe
a member of this League
In Witness whereof this Certificate has been officially signed and presented to the above

FREE CERTIFICATE

To the left is an illustration of the certificate provided all members of the SCIENCE FICTION LEAGUE. **It is sent to all members upon receipt of 15c in stamps to cover mail charges.**

WONDER STORIES is the voice of the SCIENCE FICTION LEAGUE—a monthly department appears in the magazine.

THE SCIENCE FICTION SWAP COLUMN

A department for the buying, selling, and exchanging of fantastic literature. Only ads of this nature accepted. Rates 2c per word. No discounts. Cash should accompany all orders. Advertisements to appear in the September issue must be received not later than July 5th. Send all communications to WONDER STORIES, SWAP EDITOR, 99 Hudson St., New York City, N. Y.

FOR SALE

A. MERRITT'S famous "Moon Pool"—one of the valuable first editions. What am I offered? Ted Lutwin, 172 Pavonia Ave., Jersey City, N. J.

I WILL ALLOW five per cent (5%) discount to all members of the SCIENCE FICTION LEAGUE on all purchases of science-fiction material which I offer for sale. Low prices to everyone—material in excellent condition. Send a three cent stamp for lists. Forrest J. Ackerman, 530 Staples Ave., San Francisco, Calif.

"THE Kingdom of the Worm" by Clark Ashton Smith and "The Ancient Voice" by Eando Binder—never before published. Limited edition, ten cents each. Charles D. Hornig, 137 W. Grand St., Elizabeth, N. J.

CLARK ASHTON SMITH presents "The Double Shadow and Other Fantasies"—a booklet containing a half-dozen imaginative tales. Price: 25c each, prepaid. Clark Ashton Smith, Auburn, Calif.

SCIENCE-FICTION'S most popular magazine—WONDER STORIES. Subscribe now, $2.50 per year. The voice of the SCIENCE FICTION LEAGUE.

"HOW to Write a Science-Fiction Story" and "Celebrities I've Met"—information on science-fiction notables. Both for 10c. Charles D. Hornig, 137 W. Grand St., Elizabeth, N. J.

COLLECTORS!—Add one or more of my original manuscripts to your collection. I am offering for sale such stories as "The Human Termites," "The Conquerors," "The Evening Star," "The Menace," "The Metal Doom" and others—all the bona-fide typescripts—no carbon copies. All stories are full novel length. What am I offered? David H. Keller, 55 Broad St., Stroudsburg, Pa.

FOR SALE or Rent: Complete file: Wonder, Amazing, Astounding, Argosy stories, '29 to '34. Also Quarterlies. Charles Thalinger, 2415 N. Broadway, St. Louis, Mo.

PAMPHLET containing articles of interest to all science-fiction fans. "How to Collect Fantasy Fiction" – "Science Fiction in English Magazines" and dozens of items concerning science-fiction authors, stories, and general facts of interest. Only 10c. Charles D. Hornig, 137 W. Grand St., Elizabeth, N. J.

WANTED

WANTED—the book by Hugo Gernsback, "Ralph 124c 41plus," etc., also other science-fiction books in good condition. Want certain Wonder Stories Monthlies and other Gernsback Publications from 1922 to 1927, inclusive. Am in the market for all good science-fiction material. W. A. King, Box 236, Chesley, Ontario, Canada.

ISSUES of Weird Tales dated 1923-4-5 and certain covers from old Amazing Stories. What do you want for them? Charles D. Hornig, 137 W. Grand St., Elizabeth, N. J.

EXCHANGE

WILL supply any magazine in exchange for Wonder Stories, Amazing, or Weird Tales. Will also pay cash if necessary. Zaby, 244 W. 74th St., New York City.

WILL exchange "The Land That Time Forgot" for "The Time Machine" by Wells. Stephen Tucker, Masonic Home, Wallingford, Conn.

WONDER STORIES 1929 to 1933 inclusive for Weird Tales or what have you? F. Strysik, 1109 Clement St., Joliet, Ill.

THE SCIENCE FICTION LEAGUE

(Continued from page 372)

(2) Send to Headquarters all the suggestions that you believe will improve the SCIENCE FICTION LEAGUE and its activities. You may have some valuable ideas that will greatly aid the cause of science-fiction. This department will appear monthly in the magazine and will be used as the voice of the members and executives, so do not hesitate to use it freely.

(3) If you are a student in high school or college, try to form a chapter of the LEAGUE in the building, with students as members. Most educational institutions allow for clubs of all sorts and would be pleased to harbor one more, especially one with standards as high as the SCIENCE FICTION LEAGUE. These school chapters will be treated in Headquarters as any other chapter. In order to form a chapter of the LEAGUE, send your name to us with those of all other members who wish to form the chapter and the name under which the chapter will be known. We will send you an officially signed certificate, confirming the existence of the chapter with its number.

(4) Try to write editorials propounding the merits of science-fiction in general and place them in your local newspapers. Stress the fact that science-fiction is educational and broadens the minds of the readers.

(5) Study science-fiction carefully and form a series of conclusions in your mind as to its merits and accomplishments. Organize your ideas so that you can talk freely and convincingly to potential followers on the subject. Be able to tell at a moment's notice just what it is and why you are an enthusiastic advocate. This, with Suggestion Two is very important to the purpose of the LEAGUE. All members who are instrumental in securing any special attention to the LEAGUE will receive due acknowledgment and will find that it will be profitable to them to be so mentioned.

Rome was not built in a day, we have often been told, and the same can be said for the SCIENCE FICTION LEAGUE. Organized only a very few months ago, it has not had time to develop as yet. Plans will materialize as we go along. The LEAGUE has one prime purpose—to spread the worthy gospel of science-fiction. That is the basis of the LEAGUE, and its goal will not be reached until everyone knows of science-fiction and respects it as the most powerful literary force in the world. We can hardly hope for this for a long time to come, but every scheme, plan, or idea that will aid us in reaching that goal is welcome. New ones will be broached every month by the executives and members—will you do your part? We do not expect every member to have an inexhaustible reservoir of ideas, but we will appreciate all suggestions offered.

If you have not as yet joined the LEAGUE and wish to do so, you will find application blanks in another part of the magazine.

THE READER SPEAKS

(Continued from page 370)

I hear that you are going to publish an annual of reprints. Why not a Quarterly? Editor, if you really are going to put out an annual, why don't you charge 75c or $1.00 for it as you know it comes out but once a year and twelve months is a long time to wait. Let me know so that I can put aside a given amount in advance. The more you charge, the more stories will appear. I do hope that you will take this seriously and not let it pass by.

Now to some suggestions as to what you should put in your ANNUAL. (Oh!—if it were only a Quarterly with brand-new stories!) I strongly and wholeheartedly recommend that you use these stories, my favorites:

On the Brink of 2000—Garrett Smith.
After a Million Years—Garrett Smith.
Treasures of Tantalus—Garrett Smith.
The Blue Barbarians—Stanton A. Coblentz.
After 12,000 Years—Stanton A. Coblentz.
The World at Bay—Bruce and G. C. Wallis.
Seeds of Life—Taine.
The Stone from the Green Star—
The Stone from the Moon—Otto Willi Gail.
Ark of the Covenant—Mac Clure.
Eternal Man—D. D. Sharp.
White Lily—
Moon Pool—
Voice in the Void—Simak.
At Bay in the Void—

Oh yes, there is one thing I must mention before I close and that is the copy-cat system of your rival. I noticed that whatever your publication did, she followed in your footsteps, just to be even. You remember you combined your magazine in the summer months and she did the same. You changed to the smaller size, and so did she. However, she thought she could try the trick on you but I see it didn't work. She started her Quarterly, but stopped altogether and now I suppose she wants to put out an Annual.

There must have been a mistake when you remarked in one of the footings that the "Voice of Atlantis" by Manning was one of the series written by him in a current issue. I have read no such story.

Personally, I'm not in favor of Manning's present Stranger Club series, and I don't think much of Winter's work either. (Don't get so huffed up, Mr. Editor, and anyway, whose afraid of the Big Bad Lollypop?) I prefer Paul among any artists which you try to initiate or force into the magazine.

Who, may I ask, draws the covers for your sister publication, EVERYDAY SCIENCE AND MECHANICS? I was attracted to this magazine when I saw the Invisible Man taking off his bandages.

I'm waiting for those cartoons and I sincerely hope they are humorous. I hope this letter finds its [illegible] pages of "The Reader Speaks."

I am going to write again very soon, for I want to join the SCIENCE FICTION LEAGUE. I'd better end now, for the ink just blew out. I'm in the dark now; I guess I'll have to put in a new one. OH!—there's the lights. I might as well finish what I've started, for you know the world has millions of starters but only a few finishers.

ALEXANDER NOVAK,
Trenton, N. J.

(Stanton A. Coblentz paid us a visit the other day and promised to start writing science-fiction again, so we hope to have some of his excellent stories for you soon. His thorough knowledge of human nature has brought him high praise. His stories are good cures for superiority complexes.

The annual, when it comes out, will contain only reprints from old issues of SCIENCE WONDER STORIES and the early WONDER STORIES, and will be put on sale for probably 50c. To charge any more for it would be a burden upon many of our readers.

All we can say about your eleventh paragraph is that "imitation is the sincerest form of flattery."

"Voice of Atlantis" by Laurence Manning is one of the Stranger Club series which you mention near the end of your letter.

Paul also does the covers for our sister publication, EVERYDAY SCIENCE AND MECHANICS. The scene you mention was on the cover of the February, 1934, issue. We would be pleased to have you as a member of the SCIENCE FICTION LEAGUE. EDITOR.)

"One of Those Stories"

Editor, WONDER STORIES:

After reading over Mr. Gernsback's editorial on the SCIENCE FICTION LEAGUE, I am more enthusiastic than ever over the idea. I am anxious to write radio stations, movie studios, and newspapers on our official letterheads.

Thank you for the excellent May issue. The concluding instalment of Jack Williamson's great tale, "Xandulu," is, in my estimation, the best story. Williamson is in a class with A. Merritt. Please let us have a sequel.

Yes, indeed, "The Green Cloud of Space" is one of those stories!—well-written and the best by Mr. Binder.

"Druso" starts off with high interest. Yes, I like German translations. I still consider American authors the best, however.

"Earthspot" is another of those exceptionally good science-fiction short stories.

"Traders in Treasures" is a well thought-out "different" story, Mr. Snooks.

"The Tone Machine" is an interesting short-short.

Paul's illustrations are great. I ought to have a rubber stamp made for that statement.

Don't you think that an ANNUAL made up of re-

(Continued on page 380)

NEW LOW PRICES
GOODRICH GOODYEAR 2.15
And we YOU CAN'T BEAT OUR PRICES
BALLOON TIRES
Size | Tires | Tubes
Reg. CORD TIRES
Size | Tires | Tubes
TRUCK TIRES
Size | Tires | Tubes
WE WANT DEALERS
ALL TUBES GUARANTEED Brand New
SEND ONLY $1 DEPOSIT on each tire. (On each Truck Tire send $4 deposit). We ship balance C O D, 5 per cent discount for full cash with order. All tires will be replaced at half price.
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1840 S. MICHIGAN AVE. CHICAGO, ILL.
FREE "RAY-O-VAC" LANTERN With Order for 2 Tires
Ready for instant use — no complicated wires to attach, no danger of burnt out bulbs and shorts. Can not be replaced in holder and always ready. Life necessity — a safety flashlight product.

QUIT TOBACCO
No man or woman can escape the harmful effects of tobacco. Don't try to banish unaided the hold tobacco has upon you. Join the thousands of inveterate tobacco users that have found it easy to quit with the aid of the Keeley Treatment.
KEELEY Treatment For Tobacco Habit
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Executive Accountants and C. P. A.'s earn $3,000 to $15,000 a year. Thousands of firms need them. Only 18,000 Certified Public Accountants—we will train others at home in spare time for C. P. A. examinations and executive accounting positions. Previous experience unnecessary. Personal training under supervision of staff of C. P. A.'s, including members of the American Institute of Accountants. Write for free book. Accountancy the Profession that Pays.
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The School That Has Trained Over 1,200 C.P.A.'s

Don't forget to join the
SCIENCE FICTION LEAGUE
—fill in the applications

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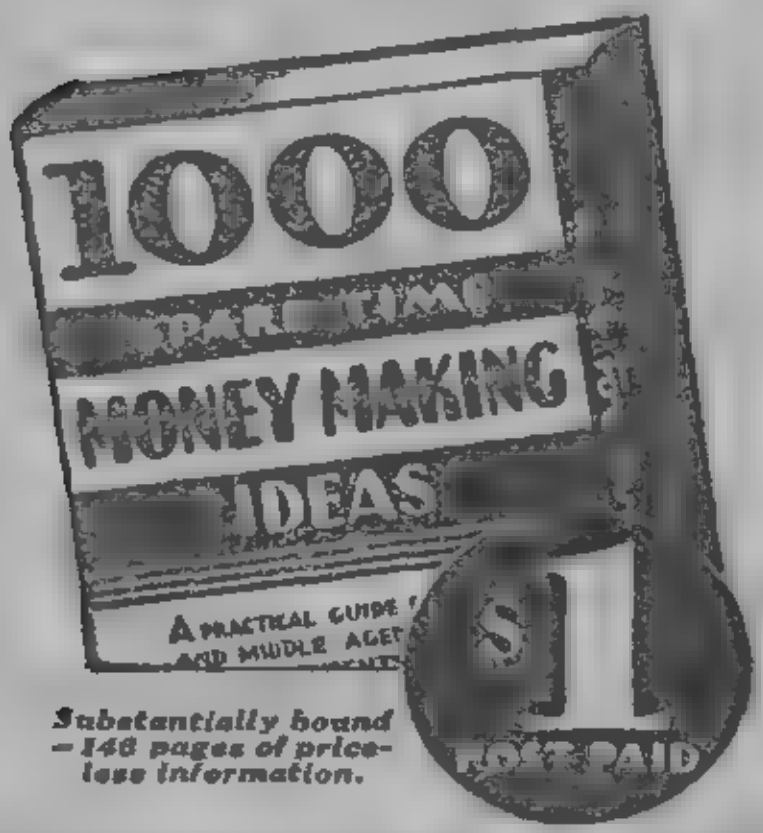

Substantially bound —148 pages of priceless information.

If you are a victim (man or woman) of the recent economic depression or a woman who wants to add to the family income or a man or woman beyond middle age and dependent upon others or a recent college graduate not yet located or a student working how to earn your year's tuition or a boy or girl desirous of turning your spare time into money—no matter who you are, if you have exhausted your resources and must earn money—this book will prove a sound and helpful guide to you.

The 1,000 practical, money-making plans outlined in its pages were not created out of the imagination. They are true reports of what thousands of people are actually doing at the present time to earn extra money. The plans have been tried, and have been found practical, successful and profitable.

Authentic Sources

Says the author regarding this remarkable and timely work—"Exhaustive and painstaking research was necessary to obtain the 1,000 money-making suggestions comprising this book. Every available source was tapped. Special thanks and acknowledgment is extended to the U. S. Department of Labor, the Bureau of Home Economics, the Children's Bureau, the Office of Education, the Department of Agriculture, the Department of the Interior, the Congressional Library, and the Superintendent of the United States Government Printing Office for supplying the writer with all available documents, bulletins and publications."

Written to fill an immediate and pressing need, this exhaustive compilation and description of over one thousand ways to turn spare time into money is now available to everyone needing it. No matter what your state or condition, age or sex, it will offer at least one and probably many suggestions which you may be able to turn quickly into money. It has been priced so as to be within the reach of all—$1.00 postpaid in the United States and Canada—to foreign countries, $1.25. Order today before the supply is exhausted

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I enclose $1.00 for which please send me a copy of *1,000* Money Making Ideas. I understand that my money will be refunded if the book does not prove entirely satisfactory. (Enclose $1.25 from countries other than U. S. and Canada.)

Name .....

Street .....

Town ..... State .....

THE READER SPEAKS

(Continued from page 379)

prints from early issues would be unfair to the greater number of your readers who no doubt have been with the magazine since the beginning? I would like to see the best-liked early stories in more permanent book form.

JACK DARROW,
Chicago, Ill.

(You and Mr. Ackerman are the only two fans who were given an honorary membership into the SCIENCE FICTION LEAGUE because we know that your whole heart is in the subject and you will do all you can to further the cause.

The very idea of putting the reprints from old SCIENCE WONDER STORIES in a separate book is to save our old readers from having to buy them in the monthly—and you are mistaken when you say that most of our readers have read them. We have acquired more readers during the past five years than we started off with.—EDITOR.)

"What a Torture"

Editor, WONDER STORIES:

I have just finished the June WONDER STORIES and it sure is swell. On Paul's cover we see the Immortals going under the ray which made them so. Is that woman the first, and if not, where are the rest?

As usual, Dr. Keller's story was original and interesting (what a torture). He could give the Spanish Inquisitionists some lessons. Winter's illustration was good too.

"Druso" lives up to the German standard which is A-plus.

In "Into the Infinitesimal" the fifteen seconds that it took Thomas Marison to get from the window to the cellar door all the adventures took place, I presume. The other stories were fair.

Regarding the giant telescope, if it could reach so far, couldn't the light bring scenes from infinity?

How about some reprints like "The Moon Pool," "The Time Machine," and "The Stone from the Green Star"?

How about getting Jack Williamson to write for you? Naturally, he's my choice.

Ask Mr. Sterling to write some more stories like "The Brain-Eaters of Pluto."

C. NEUFELD,
New York City, N. Y.

(The woman going under the ray on the June cover is the first of the Immortals—that is why you don't see any of the flame-creatures. Sorry we forgot to mention it.

Time passes much quicker—thousands of times as fast—in the atomic universe than in our own. Einstein's relativity takes care of this. A year on an electron would be but a fraction of a second on earth. All telescopes bring in views from infinity—infinity being all space.

The reprint question is discussed in other letters.—EDITOR.)

"Give Us Our Money's Worth"

Editor, WONDER STORIES:

Say This is the first time that I ever have had anything to say about your stories and I hope it is the last. I have been a reader of your book for some years and up to a few months ago they were interisting then no so interisting. So I quit them, and yesterday I thought I would try them agin much to my sorrow.

Why sould I pay $.25 for one story that just held My interest the title of that story is "The Green Cloud of Space" at that it was not so hot.

Come now let this VOX POX work in and give us some good stories and keep your readers. Give us our monies worth and keep the readers or keep up what your giving us and lose us.

HOWARD CROWDER,
Plattsburg, N. Y.

(Everyone has a different interpretation of "getting your money's worth." For instance, while many intelligent people with vivid imaginations feel as though they get much more than 25c worth of entertainment from each issue of WONDER STORIES, an African savage wouldn't give a penny a gross for them.—EDITOR.)

"Cut Out Them Darn Ads"

Editor, WONDER STORIES:

I am fifteen years old and deaf. I started reading W. S. several years ago. Now I have several volumes of W. S. of which I am proud but oh—you change the size from long to short. I like the smaller size, so keep it that way for a long time or forever and from then on I won't have volumes large and small. I am an expert bookbinder so have a pretty handsome set. You certainly have improved since I last remembered first reading the mag. As to the artists: Paul is excellent for his work on rockets, supermen, colossal cities, but his human beings are terrible. Winter is excellent for his figure work. Why not let Winter do the figure work and let Paul do the machines and other work? Paul's cover illustration for "The Call of the Mech-men" was a masterpiece. I like the "Reader Speaks" columns. The people who write in their complaints and brickbats look like rather grown-ups to me. It is rarely do I see a kid's letter in your columns. "The Exile of the Skies" was a corker and deserves the first place among good scientifiction stories. "Druso" by Friedrich Freksa looks promising. I have read the story before. My knowledge of German is good. I owe it to my uncle who taught me German. That's why I get much fun out of German scientifiction stories. I suggest that you cut out them darn advertisements and make the readers columns larger as I may give more information about the I.S.F.L. (INTERNATIONAL SCIENCE FICTION LEAGUE) of which I am a member. Another praise before I close my letter; I certainly say you have improved over your sister magazine, which is older than you.

ROBERT SAMPSON,
Portland, Me.

(We intend to keep the magazine the handy pocket size indefinitely. We find that it satisfies most of our readers, especially those who have to carry it about with them.

We try to give Paul all the futuristic scenes to illustrate that we can and Winter the figure work. You will notice that these two artists are now doing most of our illustrating.

It must be interesting to be able to read a science-fiction story in German first and then in English. Perhaps you can inform us whether our translator made any errors in his work. Some foreign words have two or three possible translations in our language.

If we cut out "them darn advertisements," as you suggest, we would also have to cut out WONDER STORIES. Ads are financial necessities to the running of a magazine.—EDITOR.)

He Was Disappointed

Editor, WONDER STORIES:

Prepare for a meteor shower (brick-bats to you). I was very disappointed in the April issue. Especially after reading "The Land of Mighty Insects." If I want to read stories like that I would get "Argosy" or the like. When your stories start having that old plot (the hero going through impossible odds to save the heroine, etc.) the mag does not live up to its name and the stories fall to the level of the rest on the market. I was regusted with "The Land of Mighty Insects." "Xandulu" should have been in "Weird Tales," *not* in WONDER STORIES. I was comforted somewhat by the rest, including "The Menace from Space" and "Moon Devils."

How about some good old "time-travel" tales and space-flights to unknown parts of the Universe, disclosing wonders unimaginable. I first became interested in W. S. because of its fine space-flights and time-travel tales.

One word about the artist Paul. He's a great artist, has the "stuff" in him.

JOHN TURCHIK,
Ashtabula, Ohio.

(Continued on page 882)

The NATURAL EYESIGHT SYSTEM Gives Your Eyes a New Deal

If you wear glasses, or think you should, our FOUR MONTHS' TRIAL OFFER—containing the Inspiring story of glasses discarded for Nearsight, Farsight, Astigmatism, Old Age Sight, Eyestrain, Weak Eyes, Eye Muscle Trouble, Etc., as told by USERS AT HOME of this Revolutionary System—will be mailed FREE upon request.

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SCENARIOS, *Photoplays, stories, manuscripts* edited, revised, typed. Criticisms, suggestions and valuable sales information FREE. Write Professional Institution, 1175 Broadway, Dept. 87, New York City.

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An Odorless and Tasteless Treatment Did It

Any lady can give it secretly at home in tea, coffee or food, and it costs nothing to try! If you have a husband, son, brother, father or friend who is a victim of whiskey, beer or wine, send your name and address to Dr. J. W. Hayes Co., 807 Odeon Bldg., Cincinnati, Ohio, and they will send you absolutely free, in plain wrapper, a trial package of this wonderful treatment. What it has done for others is an example of what it should do for you when used as directed. Write today and be thankful all your life.

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The Health Products Company of Kansas City is now offering a NEW scientific Home treatment to aid men and women banish quickly and easily the craving for smoking, chewing or snuff. Thousands have already proved success of this New Easy Way. Write today for **FREE** Booklet. Accept no substitutes. Write

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Send for FREE TRIAL of Neraico, a guaranteed harmless home treatment. Can be given secretly in food or drink to anyone who drinks or craves Gin, Whiskey, Home Brew, Wine, Moonshine, etc. Your request for Free Trial brings a trial supply by return mail and full $2.00 treatment which you may try under a 30 day refund guarantee. Try Neraico at our risk. ARLEE CO. Dept. H17 BALTIMORE, MD.

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Science Fiction's Best Detective

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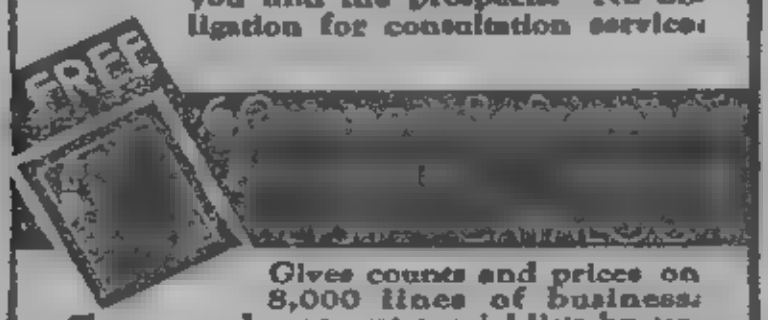
Pave the way to more sales with actual names and addresses of Live prospects.

Get them from the original compilers of basic list information—up to date—accurate—guaranteed.

Tell us about your business. We'll help you find the prospects. No obligation for consultation service.



Gives counts and prices on 8,000 lines of business. Shows you how to get special lists by territories and line of business. Auto lists of all kinds.
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Edited by DR. DAVID H. KELLER

SEXOLOGY, foremost educational sex magazine, is written in a simple language and can be read by every member of the family. It is instructive, enlightening—not a risque book—contains no jargon. Devoted to Science of Health Hygiene.

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SCIENCE FICTION SWAP COLUMN

but also fantasy stories that have never been published before

—BUY—SELL—EXCHANGE—

through this excellent service

See Page 378 in this issue

THE READER SPEAKS

(Continued from page 381)

(We are now making a drive for stories with original and refreshing plots. However, there is no reason to turn down an excellent story when it has an old idea here and there, occasionally. The plot in "The Land of Mighty Insects" was not altogether new, but at the same time, not nearly as hackneyed as it might have been. We do not want hackneyed material. However, though you condemn this story because there was an old idea behind it, you ask for good old time-travel and space-flight tales, the most hackneyed of all, especially the "good-old" ones. We will still give you stories of this type, but they must be *new* and different from their predecessors.—EDITOR.)

"One of the Best"

Editor, WONDER STORIES:

I have finished the May edition of WONDER STORIES and have classed the stories of the April and May issues as follows:

1. Xandulu.
2. Druso.
3. The Land of Mighty Insects.
4. The Last Planet.
5. The Green Cloud of Space.
6. The Moon Devils.
7. The Tone Machine.
8. The End of the Universe.
9. Traders in Treasures.

The description of the Moon Men on the cover of the April edition and the picture of them in the book are slightly different, but both artists do very good work.

I like the idea of explaining the meaning of the picture on the cover of the magazines.

On the whole, WONDER STORIES is one of the best magazines of its kind.

ROBERT VICKERS,
Columbus, Ohio.

(Your list of favorite stories is interesting. We notice that the two serials head the rest. We are now trying to arrange it so that Paul draws the inside illustration for the cover story, so that both will have the same interpretation.—EDITOR.)

A History of WONDER STORIES

Editor, WONDER STORIES:

I have read all of your publications since the beginning of your first science-fiction magazine in 1926. It has been with extreme interest that I have followed your progress from the days when you used to publish stf. in the old SCIENCE AND INVENTION (that was a good idea, by the way) to the present time. It has been more or less an evolution. If you don't believe it, you ought to see my files. They date from Vol. I, No. 1, of six of your magazines. Beginning, there are your old stf. mag., monthly and quarterly, and the one annual (alas!).

The file of your present magazines is rather upish and downish, if you know what I mean. The first issues of SCIENCE WONDER and AIR WONDER, large size, were rather thick, then came the consolidation and the SCIENTIFIC DETECTIVE STORIES, which faded into AMAZING DETECTIVE and then passed out altogether. Shortly after, we find WONDER STORIES monthly degenerating into the smaller size while the QUARTERLY remains the same (woe to the poor guy that is trying to bind them!).

After you were quite sure that everyone had gotten used to the small size (one whole year without change, a record, Mr. Editor!) back you pop to the large size again and, lo and behold—glossy paper! (More worry for the shrimp that's doing the binding.) And in four short issues, back you go again to pulp paper and a short time later to the 15c size. (That, to me, Mr. Editor, was when WONDER STORIES reached rock-bottom. You seemed to have sacrificed everything just to reduce the price.)

Back again you went to the two-bit size and then, a little later, to the smaller size and no quarterly at all. The only thing I can figure out is the Editors are trying to tease us. If you have any consideration

at all for us poor readers, let's let the magazine stay put for a while.

The best stories you have ever published are listed below in order. I had to do a lot of thinking on those and I'll bet nobody will agree with me.

1. "The Evening Star," by Keller, in SCIENCE WONDER.

2. "The Man Who Awoke," by Manning, in WONDER STORIES.

3. "The Flying Legion," by England, in AIR WONDER.

(Just a minute, Mr. Gernsback, before you throw this into the waste-basket. I purposely didn't rate your "Ralph 124C-41-plus," a very excellent story, because I wanted to give your other authors a chance.)

Your best artist? There isn't any choice—Paul is, of course.

I rate the first twelve issues of both AIR and SCIENCE WONDER STORIES the best of any period of consecutive issues. (Do I hear the Editor objecting? Well, I said *consecutive* issues. The magazine for the past year, though continuing to advance, has carried some rather mediocre stories.)

I am intensely interested in science films and was therefore interested in the stills and letter of Mr. Lenard in the April issue. (Let's have more instructive letters of this type instead of trash like this one.) All my activity on amateur motion picture photography has thus far been confined to study only. You err, by the way, when you say "Metropolis" is an American film. It is German, a UFA production. Americans don't make pictures as good as that. It would be interesting to make a scientific film, I think.

Your announcement of the SCIENCE FICTION LEAGUE is another step forward for your magazine. I am waiting with interest for details in the May issue.

By the way, I am also an aspiring author (another one!). If you don't watch out, you're going to have a new writer on your hands, if only to show up Keller, Manning, Haggard, and Schachner!

VERNON H. JONES,
Des Moines, Iowa.

(You have certainly given an accurate account of the life of WONDER STORIES and its sister publications. As you can see, it is varied and interesting, not monotonous like the format of some magazines that never change. Perhaps it is well that you did not mention Mr Gernsback's "Ralph 124C-41-plus" as one of your favorite stories—otherwise our readers might think that your letter was a paid testimonial.

When we listed "Metropolis" as an American film, we meant to include those made in other countries with English translations. As you say, it was produced by UFA.

We would like to have you as a member of the SCIENCE FICTION LEAGUE.

By your last paragraph, we think that our readers will some day be praising the "great Jones."—EDITOR.)

She Wants to Murder Manning!

Editor, WONDER STORIES:

Can you please give me some information as to the most painful way to murder an author? I'm referring to Mr. Laurence Manning, who wrote "Caverns of Horror." The big galoot gets a person all "het" up about a cavern full of strange beasts and then leaves us with the meek statement that after a period of seven years, if the cousin concerned agreed to sell the estate, more might be learned about the "Caverns of Horror." I'll bet anything that there are a lot of people who feel the way I do about him. Otherwise the stories in your WONDER STORIES are swell.

I've never read serials, but by mistake I started to read "Xandulu." Now I'm practically holding my breath, while waiting for the next issue.

MISS MARION PEPERA,
Saginaw, Mich.

(We do not believe that a young lady like yourself would enjoy murdering an author so very much, especially in the most painful way—and particularly Mr. Manning, one of our best authors. However, if

(Continued on page 384)

ANATOMICAL MANUAL

THE LIVING BODY
Male and Female

The Only Popular-Priced Anatomical Atlas Published

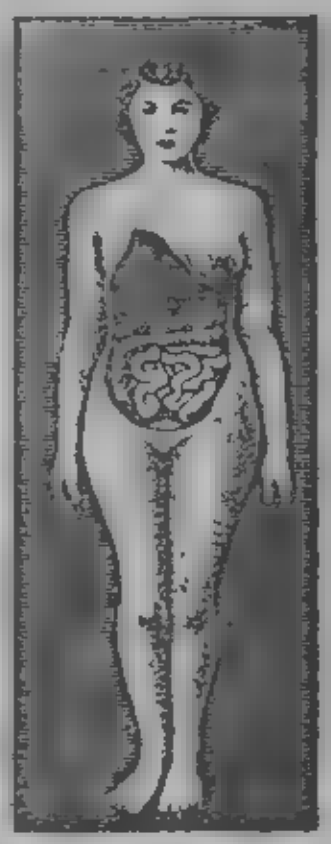
Only $2.00

A UNIQUE NEW MANUAL OF SECTIONAL ANATOMICAL CHARTS AND ILLUSTRATIONS PREPARED BY MEDICAL EXPERTS.

This new book shows the human body with each aspect of its structure in separate sections; the exact position of all organs, every bone, muscle, vein, artery, etc.

LIST OF PLATES

Plate I. [illegible]
" II. Nude Adult Male
" III. Nervous System of Female
" IV. Skeletal System
" V. Muscular System (Posterior)
" VI. Muscular System (Anterior)
" VII. Vascular System
" VIII. Respiratory System
" IX. Digestive System
" X. Male Genital Organ in Detail
" XI. Female Genital Organ in Detail
" XII. Cross Section of Pregnant Female Body with Child.



All plates (one foot high) are printed in actual natural colors.

Thus far, plates such as those presented here have been so high in price as to be inaccessible to the public. Our plan in producing these charts is to make them available to every adult person.

The book is 14 inches high and 6½ inches wide, contains twelve full-page color plates and twelve text pages illustrated with fifty photographs and drawings, made from actual photographs, and all organs and parts of the human body—male and female—are shown in great detail in natural colors.

Opposite each page, an explanatory text is provided, illustrated with photographs and drawings to show in detail the different organs and other features of the human body. The book is recommended for nurses, art students, for lawyers for use in litigations, lecturers, physical culturists, hospitals, sanitariums, schools, colleges, gymnasiums, life insurance companies, employers' health departments, etc.

But every man and woman should own a copy of the ANATOMICAL MANUAL for effective knowledge of his or her own physical self!

It is of inestimable value to the prospective mother, because of the information it provides on the essential anatomical facts of pregnancy and the structure of the female genital organs.

Money Refunded If Not Satisfactory

MAIL COUPON TODAY!

GRENPARK COMPANY, Dept. WS-834
101 Hudson Street, New York, N. Y.

Gentlemen:—Enclosed find $2.00 (Foreign and Canada remit by International money order), in full payment for a copy of the ANATOMICAL MANUAL, as per your offer

Name .....

Address .....

City .. .. State .....

$1,000 to $5,000
CASH
For a Few Pennies a Day!

Present Conditions Demand Greater Security for Home

The safety of our families and homes is continually in the minds of all of us in these times. The Union Mutual Life Company of Iowa gives you the one sure means of guaranteeing the necessities and comforts of life for your loved ones—sure, dependable financial help to fall back upon, no matter what happens.

Now, at last, you may BUY exactly the kind and amount of life insurance you NEED for the protection of your family, right in your own home, without high-pressure salesmanship and without medical examination or fees! Thus you will either SAVE all these costs, or you may BUY MORE PROTECTION for less premium!

The new history-making life insurance policy, issued exclusively by the Union Mutual Life Company of Iowa enables you to put every penny of your investment into PROTECTION for your loved ones—giving you the very MAXIMUM of dependable protection for lowest premiums, less all agents' commissions and medical fees!

Why not make up your mind RIGHT NOW to see for yourself exactly what MODERN life insurance means to you and your loved ones? Fill in and mail the coupon below. By return mail you will receive for FREE INSPECTION, one of the new Union Mutual Life policies, which, for only a few pennies a day, pays life insurance benefits of $1,000 and accident benefits of $5,000, including loan service, endowment additions, generous dividends, disability benefits and paid-up features. A standard, full-coverage legal reserve policy at nearly "net" cost.

Ask yourself this question, please: "Why shouldn't I profit by these remarkable new life insurance advantages which are created for my special benefit and service?"

Fill in the coupon below and mail today! No red tape—no medical examination and no agent will call. ACT TODAY! See the benefits of this remarkable new Union Mutual Life policy! Let us PROVE TO YOU, without one cent of expense or obligation to you that it is, indeed, the greatest life insurance offer ever made.

----------COUPON----------

Union Mutual Life Company *of Iowa*,
Dept. 218
Des Moines, Iowa.

Please send me one of your FREE policies to look over.

Name .....

Address .....

City ..... State .....

Fill in this coupon and mail today!

THE READER SPEAKS

(Continued from page 383)

you insist, we will give you his address and you can sneak up behind him some day with a sledge-hammer.

We think that "Caverns of Horror" was an exceptionally good story because the author left it 'hanging in the air," as we say, which is more true to life than the conventional happy ending. Perhaps we will print a sequel to it seven years from now, after the cousin sells the estate.

We are surprised that you don't read our serials; they are some of our best work. You can save yourself the suspense from month to month by saving the instalments until you have the complete story.—EDITOR.)

"Tie Him Up, Hypnotize Him!"

Editor, WONDER STORIES:

Say, don't let Richard Vaughan get away! Tie him up, hypnotize him, but don't let him get away! He wrote "The Exile of the Skies" too well to be permitted to escape. I think a sequel to "The Land of Mighty Insects" would be just the thing as long as we're on the author subject.

"Xandulu" is a typical Jack Williamson story, and I'll be sorry when it ends.

Paul's and Winter's illustrations of the Moon-men differ greatly. Can't those two guys ever agree?

JOHN MALONE.
Jackson, Miss.

(It would do us no good to tie down Author Vaughan. He might become peeved and refuse to write any more for us. You know the old saying, "You can tie an author down, but you can't make him write!" Anyway, that's the editor's version.—EDITOR.)

Sorry to See the End

Editor, WONDER STORIES:

I have just finished reading the March issue of WONDER STORIES. I am sorry to see "Exile of the Skies" end, because it has given me much pleasure. I hope we shall have more stories from Kenneth Sterling such as "The Brain-Eaters of Pluto." The story "Caverns of Horror" by Laurence Manning is my idea of a *story*. Well, I guess I'll quit for this time.

CHARLES L. HARMON.
Seattle, Wash.

("The Exile of the Skies" certainly made a big hit with our readers and we would not be surprised to see it classed with the best masterpieces of recent science-fiction.

We find that slap-stick burlesque stories are not wanted by the majority of our readers, but will continue to give you those containing real humor, such as the recent "Tyme" stories.—EDITOR.)

Sequels Wanted

Editor, WONDER STORIES:

This is the first time I have written to your magazine as I have only read a few issues of WONDER STORIES. In most cases, I have found the stories to be very good. However, I wish you would print sequels to two stories that were in the April WONDER STORIES.

These stories are "The Land of Mighty Insects" and "The Last Planet."

"The Moon Devils" and "The Menace from Space" are also very good stories.

Let's have more stories about interplanetary exploration.

ROBERT VICKERS.
Columbus, Ohio.

(We are always glad to present sequels to stories when the authors take it upon themselves to write them and when they are at least as good as the original stories.—EDITOR.)

A NEW LIFETIME BUSINESS

OPENED TO EARNEST MEN

NO HIGH PRESSURE SELLING
NO HOUSE-TO-HOUSE CANVASSING

INCOME EQUAL TO REQUIREMENTS OF THE HIGH-GRADE BUSINESS MAN

G. F. Pegram, Texas, clears $315 in his first 5 days in this business. J. C. May, Connecticut, cleared $262.35 in 9 days. B. Y. Becton, Kansas, sells 91 units in 40 days' working time. C. W. Ferrell, Ohio, writes: "My earnings have run well above $1,000 in a month's time"—he has made over 1,000 sales, paying him as high as $5 to $60 profit each sale. J. Clarke Baker, Connecticut, sells 13 firms in 8 days' time, netting $151.71 clear profit—over $50 a day profit. Writes that 9 of these 13 firms are already using second or third repeat refill orders. And so on. These men had never sold this item before they came with us! How could they enter a field totally new to them and earn such remarkable sums in these desperate times? Read the answer in this announcement. Read about a new business that does away with the need for high pressure selling. A rich field that is creating new money-making frontiers for wide-awake men. Those who enter now will pioneer—to them will go the choicest opportunities.

FOUR $15 SALES DAILY PAY $280 WEEKLY

INSTALLING NEW BUSINESS SPECIALTY ON FREE TRIAL — MAKING EXCEPTIONAL CASH SAVINGS FOR CONCERNS THROUGHOUT THE U. S. AND CANADA

$4,707 Returns For One Kansas Store in Three Months

Sanders Ridgway of Kansas invests $85.00 and shows returns of $4,707.00 between April 5th and June 29th! Bowser Lumber and Feed Co., West Virginia, invests $15, report returns well over $1,000.00! Fox Ice and Coal Co., Wisconsin, returns $3,564.00! Baltimore Sporting Goods Store invests $45, returns $1,600.00.! Pollom & Son, Indiana, in 45 days turned $15 installation into $2,250 cash.
With these and scores of similar results to display, our representatives interest business men from the very smallest to the very largest. No one can dispute the proof in the photocopies of actual letters which our men show.

NO HIGH PRESSURE —SIMPLY INSTALL— LET IT SELL ITSELF

Here is a business offering an invention so successful that we make it sell itself. Our representatives simply tell what they offer, show proof of success in every line of business and every section of the country. Then install the specialty without a dollar down. It starts working at once, producing a cash return that can be counted like the other cash register money. The customer sees with his own eyes a big, immediate profit on his proposed investment. Usually he has the investment, and his profit besides, before the representative returns. The representative calls back, collects his money. OUT OF EVERY $75 BUSINESS THE REPRESENTATIVE DOES, NEARLY $60 IS HIS OWN PROFIT! THE SMALLEST HE MAKES IS $5 ON A $7.50 SALE! And the deal has been made without toil and trouble, without high pressure, without drudgery, without argument! Nothing is so convincing as our offer to let results speak for themselves! While others fail to even get a hearing, our men are making sales running into the hundreds. They are getting the attention of the largest concerns in the country, and selling to the smaller businesses by the thousands. Business is GOOD, in this line, in small towns or big city alike! It's on the boom now. Get in while the business is young!

COMPLETE TRAINING FURNISHED

Many men with us today started at scratch, many coming out of clerking jobs, many out of small businesses, some out of large concerns. We teach you every angle of the business. We hand you the biggest money-making business of its kind in the country. You try out this business ABSOLUTELY WITHOUT RISKING A RED COPPER CENT OF YOUR OWN. Can't possibly tell you all in the limited space available here. Mail the coupon now for full information—nothing to risk, everything to gain.

Start on Small Scale

You can start small and grow big. This is the field that the young man should enter and grow with. The mature man has the seasoning of experience which should be exceedingly valuable in this business. You can get exclusive rights. With profits from your first business you may open an office, hire salesmen, branch out into open territory where available, after you get going. Exclusive contract puts you in position to build an established permanent business which can be sold like any other business. Give your customers satisfactory service and they will be your prospects for repeat orders as long as they are in business. You can pay your salesmen double what they make in many lines, and yet have a big margin left for yourself.

F. E. ARMSTRONG, *President,* **Dept. 4058-G, Mobile, Ala.**

A Brilliant Record of Success

Many of America's foremost concerns are among our customers. As well as selling thousands of installations to small merchants, professional men, etc., we number either the parent companies or branches, or dealers, etc., of many world-famed concerns among our customers: Cities Service Oil Co., Great Lakes Fisheries, Inc., National Majestic Radio, Chevrolet, Chrysler, Damascus Steel Products, Public Utilities, Consolidated Corporation, Union Gas Corp., Yawman and Erbe Mfg. Co. [world's foremost office equipment firm], Coca-Cola Bottling Co., National Radio, Timken Silent Automatic Co., Central States Petroleum, United Aluminum Corp., Street Railways Advertising Co., Great American Life Underwriters, National Paper Co., and scores of others nationally known. Universities, newspapers, doctors, etc., buy substantial installations and heavy repeat orders.

Customer Guaranteed Profit

Customer gets signed certificate guaranteeing cash profit on his investment. Very few business men are so foolish as to turn down a proposition guaranteed to pay a profit, with proof from leading concerns that it does pay.

Portfolio of References from America's Leading Concerns

Is furnished you. A handsome, impressive portfolio that represents every leading type of business and profession. You show immediate, positive proof of success. Immediately forestall the argument, "Doesn't fit my business." Shows that it does fit, and does make good. Closes the deal.

Rush the Coupon for Full Information Territory Filled in Order of Application

If you are looking for a man-size business, free from worries of other overcrowded lines of work, get in touch with us at once. Learn the possibilities now before the franchise for your territory is closed. This specialty is as important a business opportunity today as the typewriter, adding machine, and dictaphone were in their early days. Don't lose valuable time, and let this slip away from you. Use the coupon for convenience. It will bring you full information and our proposition immediately.

MAIL FOR FULL INFORMATION!

F. E. ARMSTRONG, Pres., Dept. 4058-G, Mobile, Ala.

Without obligation to me, send full information on your proposition.

Name .....

Street or Route .....

Box No. .....

City .....

State .....

I WANT MEN

for TEA *and* COFFEE ROUTES

START IN EARNING UP TO $60.00 A WEEK

PROVEN PROFITS

NO EXPERIENCE OR TRAINING REQUIRED

If you are a good, honest person, willing to follow my simple plain instructions you are eligible to handle one of these fine-paying Routes. Earnings begin at once. There is no long wait or delay to get the money you need. You can devote either full or spare time to the business. Even spare-time Route Operators make up to $5.00 a day. You will really be in business for yourself, with no one to boss you. The work is pleasant, the hours are short, and the profit possibilities are exceptionally large.

Have a PERMANENT ROUTE With a Big Weekly Cash Income

Everybody uses Coffee, Tea, Spices, Extracts, Baking Powder and similar household supplies. They need these things to live. You simply take care of a regular route in your locality, making calls on your customers once a week and keeping them supplied with the things they need. You handle the money and keep a big share of it for yourself. You get all the profits—you don't divide up with anyone. I'll furnish you with hundreds of fine premiums and amazing special bargain offers just to give your customers. Hundreds of people are waiting to be served in many localities.

MONEY FOR YOU AT ONCE

My amazing new Tea and Coffee Route Plans provide for your having immediate cash earnings. If you are honest and reliable and willing to take good care of the customers on one of these Routes, then you are just the person I am looking for. You will start in your own locality, right near where you live. There is nothing hard or difficult about the work. There will be no red tape connected with getting started. You won't have to rent a store, buy fixtures, or other high priced equipment to start with.

I FURNISH EVERYTHING

Just as soon as I hear from you I will send you complete details of the inside workings of this nation-wide Tea and Coffee Route Plan that is taking the country by storm. I will explain just how you go about handling the business. The plans I give you cost me thousands upon thousands of dollars and years of time to prepare. They are time-tried and proven. They have brought quick money relief to hundreds and thousands. Why not to you?

LOOK AT THESE UNUSUAL EARNINGS

My Tea and Coffee Plans are not an experiment. If you have been working part time or for low wages, this is your opportunity to get more cash immediately—money to pay your bills and live well. Here's what some have already done: Wm. E. Berkhimer, Pa., cleared $20.00 in one day and as high as $90.00 in one week. Stanford Berg, Ind., $75.00 in one week. Wm. H. Newcomb, N. Y., $24.00 in one day, $80.00 in one week. G. V. Budaus, Texas, jumped his income from $20.00 a week to $85.00 in a week. These exceptional earnings show the amazing possibilities of the offer I am now making to you. Better send me your name today and find out the great possibilities of my offer.

SEND NO MONEY—JUST NAME

Don't send me a cent. Just rush me your name so I can lay all the facts before you and then you can decide for yourself. My plans are complete. I send you absolutely free the details of my offer. I even furnish brand-new Ford Tudor Sedans to producers as an extra bonus. Send name on coupon or penny postcard. Costs nothing. Do it today.

SPECIAL OPENINGS FOR WOMEN

I have wonderful reports of the success women are having handling Neighborhood Tea and Coffee Routes. Even in their spare time they make as high as $5.00 a day. The work is light and pleasant. Mrs. Carrie McCalmont, Nebr., had earnings of $50.00 in a week, despite a sick husband and two children to take care of. Mrs. Jewel Hackett, here in Ohio, decided to try the business and she made $33.00 in seven hours. These are a few of the hundreds of exceptional earnings reported, showing what can be done with my plan.

YOUR OWN FOOD PRODUCTS AT WHOLESALE PRICES

When I send you details of my new Neighborhood Tea and Coffee Route Plan, I also give you rock-bottom wholesale prices on your own groceries and household necessities. This is in addition to your regular daily earnings. So you make big money in cash and save big money on the things you use in your own home.

FORD SEDANS GIVEN

I furnish my producing Route Operators with brand-new Ford Tudor Sedans as an extra reward or bonus. This is not a prize contest or a raffle. You can get a car in addition to your regular big weekly cash earnings.

FOOD ROUTE COUPON

ALBERT MILLS, President
5082 Monmouth Ave., Cincinnati, Ohio

Here's my name. Rush me free particulars of your sensational Tea and Coffee Route Plan, showing just how I can get started on a basis of up to $60.00. I understand there is no obligation on my part.

Name .....

Address .....

.....
(Please Print or Write Plainly)

NRA
WE DO OUR PART

THE BEST IN SCIENCE FICTION

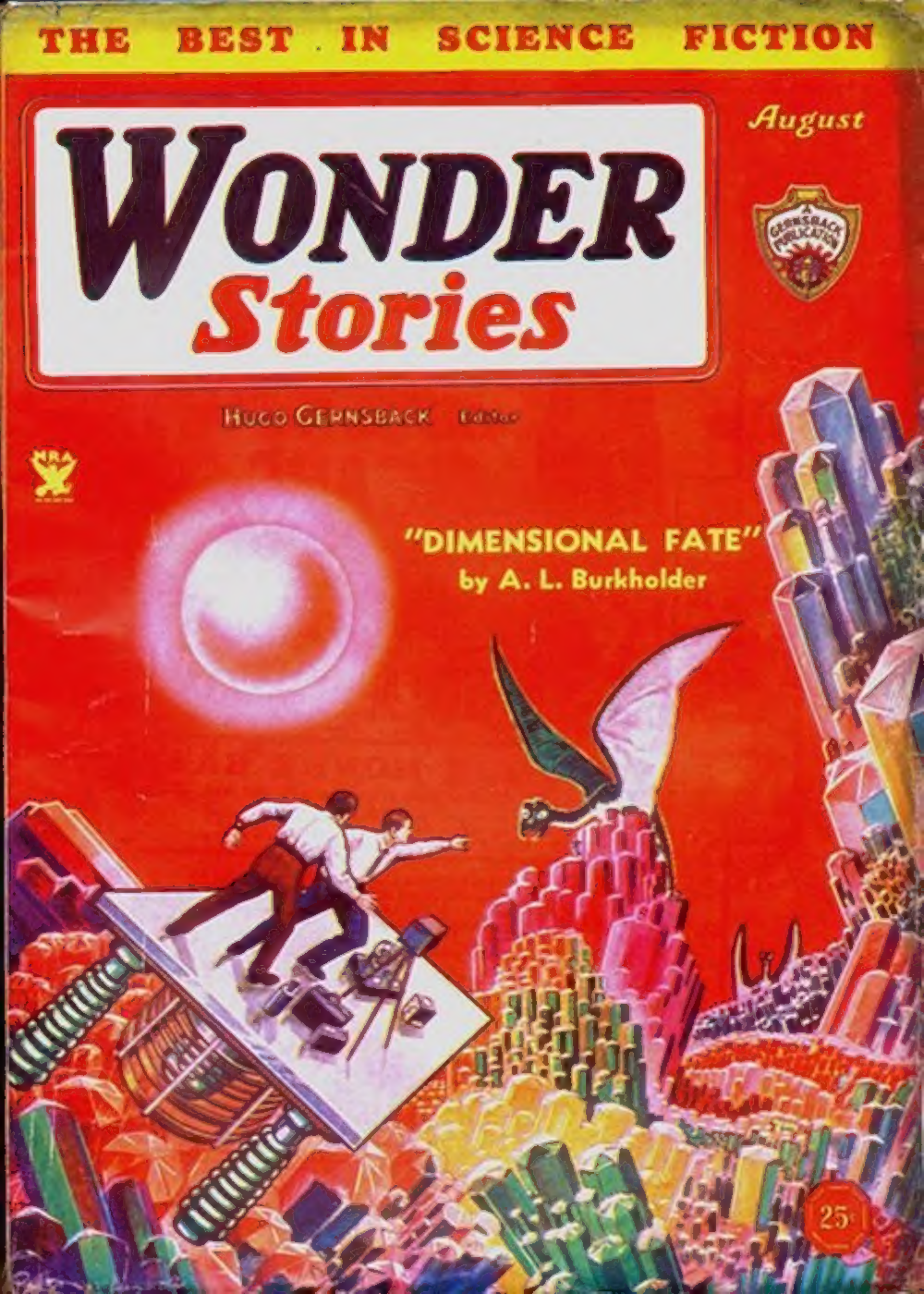
WONDER Stories

August

A GERNSBACK PUBLICATION

HUGO GERNSBACK Editor

"DIMENSIONAL FATE"
by A. L. Burkholder



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